

Ethiopian Economics Association



Report on the Ethiopian Economy 2025

Economic Performance and Governance in Ethiopia

**Report on the Ethiopian Economy 2025
Economic Performance and Governance in Ethiopia**

ISBN 978-99990-0-280-



2025

Report on the Ethiopian Economy 2025

ECONOMIC PERFORMANCE AND GOVERNANCE IN ETHIOPIA

May 2025



© 2025 Ethiopian Economics Association (EEA)

ISBN: 978-99990-0-280-6

ISBN 978-99990-0-280-6



The analysis and policy recommendations of this Report do not necessarily reflect the views of the Ethiopian Economics Association, its Executive Committee or its Members. The Report is the product of the team of researchers in the Ethiopian Economics Association.

Inquiries should be addressed to:

Ethiopian Economics Association

P.O. Box 34282

Tel: +251 11 645 3200, 3329, 3041

Email: info@eea-et.org

Website: <https://eea-et.org/>

FOREWORD

The Ethiopian Economics Association (EEA) is a non-profit, non-partisan and independent professional association established in 1991 with the primary aim of promoting development of the economics profession and contributing to policy formulation and implementation process of Ethiopia through research, training and capacity strengthening, and policy forums. The EEA flagship publication titled ‘Report on the Ethiopian Economy’ was terminated in 2018. The pre-2018 report was designed to provide the government and other stakeholders with a comprehensive update on Ethiopia's economy, focusing on key sectors and macroeconomic aggregates. It played a crucial role in highlighting the economy's performance through two levels of analysis: an in-depth examination of a specific overriding issue and general updates on other topics. In contrast, the current report distinguishes itself by employing standard methodologies to deliver an in-depth analysis of all examined chapters.

I am deeply honored to introduce this timely and relevant book as a continuation of the publication. The report examines the performance of the Ethiopian economy and addresses the key challenges impeding economic and social progress. It evaluates the extent to which Ethiopia has achieved its development policy objectives since 2001, analyzing the dynamics of major macroeconomic aggregates, microeconomic welfare measures, achievements, gaps, and their interconnections. Additionally, it investigates critical socioeconomic, policy, and governance challenges. By benchmarking international development achievements, the report derives valuable lessons for Ethiopia. Based on these findings, policy implications and key insights are synthesized and presented.

The book investigates the performance of the Ethiopian economy by sectors, regional states, and rural-urban settings. It assesses how much the intensity of domestic conflicts and political instabilities is affecting productive capacities of the country. Domestic conflicts and political instabilities have substantially constrained the capacity of the country to maintain macroeconomic stability through the production, distribution, and marketing of more goods and services. The results signify that the Ethiopian economy is multidimensionally stagnated, calling the urgent need for policy actions deemed relevant to revert the overall economic recession expected after stagnation.

I believe this book will be a valuable reference for policy makers, development partners, researchers, academia, the private sector, and other stakeholders working for economic and social progress in Ethiopia.

Finally, I would like to thank the writers of the book for their dedication and professionalism in undertaking this rigorous study and generating problem-solving and policy-relevant findings on the Ethiopian economy. I am also grateful to the members of the Executive Committee (EC) and the management team of the EEA for guiding and supporting the research team.

Tassew Woldehanna (Professor)

President, Ethiopian Economics Association (EEA)

ACKNOWLEDGMENTS

This report is the result of a concerted effort of many people. The Ethiopian Economics Association (EEA) would like to gratefully acknowledge their valuable contributions. After having critically assessed and identified the major vacuum created for an independent review of the Ethiopian economic performance and its challenges in recent years, the Executive Committee of the Ethiopian Economic Association gave a direction to reinstitute the “Report on the Ethiopian Economy” and oversee the progress and completion of the report. The EEA appreciates Prof. Mengistu Ketema, CEO of the EEA for his professional contributions to frame, review, and validate the contents of the book and the overall supervision and guidance for the successful completion of the report.

The writing of the book was coordinated and consolidated by Dr. Degye Goshu, Director of Research and Policy Analysis. The EEA is also very grateful to the EEA senior researchers who have written the 10 chapters of the book at the expected standard, coverage, relevance, and depth of analysis. They deserve special recognition for their dedication to writing the book chapters:

- Dr. Degye Goshu (Director of Research and Policy Analysis) for writing five chapters on (i) Introduction; (ii) Aggregate Output and Productive Capacities; (iii) Performance of the External Sector; (vi) Poverty and Inequality; and (v) Policy and Governance.
- Dr. Lamessa Tariku (Team Leader for Trade and Industrial Development) for writing two chapters on (i) Performance of the Industrial Sector; and (ii) State of the Labor Market.
- Dr. Arega Shumetie (Team Leader for Agriculture and Rural Transformation) for writing two chapters on (i) Agricultural Production and Food Supply; and (ii) Fiscal Developments.
- Dr. Tasew Tadesse (Team Leader for Macroeconomy) for writing the chapter on the Performance of the Financial Sector.

All the book chapters have passed through rigorous internal validation and review with the active participation of EEA staff and other members of the EEA. Mr. Demirew Getachew, Research Project Coordinator at the EEA, has particularly coordinated the overall validation process of the book chapters. The EEA is thankful for his important role in programming and organizing the validation workshops. The EEA is grateful to Mr. Dawit Teshale, Event Organizer and Survey Expert at the EEA, who has played a significant role to organize and conduct the online expert survey of EEA members to assess the perception of experts on several aspects of the Ethiopian economy.

The book chapters were also internally reviewed by the EEA research staff and other members of the management team to cross-fertilize contents of the book. Review of the book by Dr. Abule Mehare, Dr. Lamessa Tariku, Dr. Arega Shumetie, and Dr. Tasew Tadesse was indispensable to improve contents of the book. The EEA is thankful to their unreserved effort and critical reviews. Many other people, including the staff and members of the EEA, have also made considerable contributions to the successful preparation and completion of this report. The EEA extends its appreciation to all of them.

The EEA has also obtained invaluable insights from members of the Executive Committee (EC) of the EEA. Prof. Tassew Woldehanna, President of the EEA, Dr. Lemma Gudissa, Vice President of the EEA, and other members of the EC have substantially contributed to the book. Most of the book chapters were validated by the EC members and their comments were constructive to improve contents of the book. Notably, Dr. Worku Gebeyehu and Dr. Berhanu Denu have shared their valuable insights on the improvement of the book chapters. Dr. Tadesse Kuma has played a pivotal role to access the official data on the Ethiopian economy. The EEA has also benefited more from their indispensable guidance in terms of aligning contents of the book with the current priorities in the Ethiopian economy.

TABLE OF CONTENTS

FOREWORD	iii
ACKNOWLEDGMENTS	v
FIGURES	xiv
TABLES	xxiv
1. INTRODUCTION	1
2. AGGREGATE OUTPUT AND PRODUCTIVE CAPACITIES	7
2.1. Introduction	7
2.2. Methodology	9
2.2.1. Datasets	9
2.2.2. Methods of data analysis	10
2.2.3. Definition of variables	12
2.3. Aggregate Output	15
2.4. Production Linkages	22
2.5. Aggregate Demand	27
2.6. Macroeconomic Instability	29
2.7. Productive Capacities	35
2.8. Human Capital	41
2.9. Natural Capital	44
2.10. Energy and Transport	48
2.11. ICT, Institutions, and the Private Sector	49
2.12. Structural Change	52
2.13. Concluding Remarks	53
References	56
3. AGRICULTURAL PRODUCTION AND FOOD SUPPLY	57
3.1. Introduction	57
3.2. Agricultural Production	59
3.2.1. Agriculture value added	59

3.2.2.	<i>Crop production</i>	65
3.2.3.	<i>Livestock production</i>	73
3.2.4.	<i>Meat and milk production</i>	79
3.2.5.	<i>Honey and egg production</i>	82
3.2.6.	<i>Performance of other sub-sectors</i>	84
3.3.	Supply of Agricultural Products	86
3.3.1.	<i>Supply of crops</i>	86
3.3.2.	<i>Supply of livestock products</i>	88
3.4.	Agricultural Inputs	90
3.4.1.	<i>Cropland allocation</i>	90
3.4.2.	<i>Chemical fertilizer</i>	95
3.4.3.	<i>Credit access</i>	97
3.5.	Constraints in Agricultural Sector	99
3.5.1.	<i>Natural factors</i>	99
3.5.2.	<i>Institutional and infrastructural facilities</i>	102
3.5.3.	<i>Conflicts and political instabilities</i>	103
3.5.4.	<i>Input and output prices</i>	104
3.6.	Food Security	104
3.6.1.	<i>Hunger</i>	104
3.6.2.	<i>Perceived food security</i>	107
3.6.3.	<i>Households' Response to Food Security Shocks</i>	109
3.7.	Concluding Remarks	111
	References	114
4.	PERFORMANCE OF THE INDUSTRIAL SECTOR	119
4.1.	Introduction	119
4.2.	Methodology	120

4.3.	Industrial Policy of Ethiopia.....	121
4.3.1.	<i>Industrial policy 1992-2018</i>	122
4.3.2.	<i>Industrial policy in the post-2018 period</i>	125
4.4.	Structure of the Manufacturing Sector.....	126
4.5.	Performance of the Manufacturing Sector	129
4.5.1.	<i>Manufacturing value added (MVA).....</i>	129
4.5.2.	<i>Export contribution</i>	133
4.6.	Competitiveness of the Manufacturing sub-Sector	137
4.7.	Manufacturing Inputs	142
4.8.	Industrial Parks.....	147
4.8.1.	<i>Job creation by industrial parks.....</i>	149
4.8.2.	<i>Export performance</i>	151
4.9.	Constraints Facing the Manufacturing Sector	152
4.10.	Concluding Remarks.....	155
	References	157
5.	PERFORMANCE OF THE EXTERNAL SECTOR	158
5.1.	Introduction	158
5.2.	Methodology	159
5.2.1.	<i>Data and methods</i>	159
5.2.2.	<i>Definition of variables.....</i>	160
5.3.	Balance of Payments	162
5.4.	Trade Performance	167
5.5.	Trade Diversification	174
5.6.	Trade Concentration	176
5.7.	Economic Complexity	178
5.8.	Depreciation of Exchange Rate	184
5.9.	Globalization.....	192
5.9.1.	<i>Dynamics</i>	192
5.9.2.	<i>Consistency.....</i>	195

5.9.3. <i>Socioeconomic impacts</i>	196
5.10. Concluding Remarks	200
References	202
6. PERFORMANCE OF THE FINANCIAL SECTOR	204
6.1. Introduction	204
6.2. Data and Methods	209
6.3. Monetary Developments	209
6.3.1. <i>Monetary policy</i>	209
6.3.2. <i>Money supply</i>	211
6.3.3. <i>Inflation</i>	214
6.4. Developments in the Financial Sector	220
6.4.1. <i>Access to financial institutions</i>	220
6.4.2. <i>Credit</i>	225
6.5. Profitability and Efficiency of the Banking Industry	232
6.5.1. <i>Return on assets and return on equity</i>	232
6.5.2. <i>Efficiency of the banking sector</i>	235
6.6. Financial Inclusion	238
6.7. Digital Finance	242
6.8. Concluding Remarks	245
References	250
7. FISCAL DEVELOPMENTS	251
7.1. Introduction	251
7.2. Trend Government Revenue	254
7.3. Government Expenditure	261
7.4. Fiscal Balance	265
7.5. Public Debt	270
7.5.1. <i>Debt outstanding</i>	270
7.5.2. <i>Debt service</i>	280
7.5.3. <i>Debt burden</i>	283

7.5.4. <i>Debt and fiscal policies</i>	292
7.6. Official Development Assistance and Aid	300
7.7. Concluding Remarks	302
References	305
8. STATE OF THE LABOR MARKET	307
8.1. Introduction	307
8.2. Methodology	307
8.2.1. <i>Data sources</i>	307
8.2.2. <i>Definition of key variables</i>	308
8.2.3. <i>Data analysis</i>	309
8.3. Population and Labor Force Policies	309
8.3.1. <i>Population policy</i>	309
8.3.2. <i>Labor Policy</i>	314
8.4. The Labor Force	316
8.4.1. <i>Working age population</i>	316
8.4.2. <i>Labor force participation</i>	319
8.4.3. <i>Reasons for not participating in the labor market</i>	323
8.5. Employment	326
8.5.1. <i>Overall employment situation in Ethiopia</i>	326
8.5.2. <i>Sectoral distribution of employment</i>	331
8.5.3. <i>Employment by major occupation groups</i>	334
8.6. Unemployment	336
8.7. Wage Rate and Policy	341
8.7.1. <i>Wage rate</i>	341
8.7.2. <i>Minimum wage policy</i>	345
8.7.3. <i>Lessons for Ethiopia</i>	350
8.8. Concluding Remarks	352

References	356
9. POVERTY AND INEQUALITY	358
9.1. Introduction	358
9.2. Methodology	359
9.2.1. Datasets	359
9.2.2. Determination of the poverty line	362
9.2.3. Estimation of poverty and inequality	363
9.2.4. Measuring pro-poor growth	366
9.3. Poverty Profiles	369
9.4. Poverty Incidence	375
9.5. Depth and Severity of Poverty	378
9.6. Decomposition of Poverty	380
9.7. Inequality	383
9.8. Pro-Poor Growth	386
9.8.1. Poverty effects of growth and redistribution	387
9.8.2. Pro-poor indices	390
9.8.3. Pro-poor growth curves	392
9.9. Concluding Remarks	404
References	406
10. POLICY AND GOVERNANCE	407
10.1. Introduction	407
10.2. Data and Methods	409
10.3. Definition of Variables	409
10.3.1. Policy	409
10.3.2. Governance	412
10.4. Policies and Institutions	415
10.5. Governance Status	421
10.6. Governance Performance	424
10.7. Domestic Conflicts	427

10.8. Causes and Drivers of Conflicts430

10.9. Socioeconomic Impacts of Conflicts433

10.9.1. Perceived impacts433

10.9.2. Revealed impacts436

10.10. Concluding Remarks.....446

References448



FIGURES

Figure 2.1: Real GDP and political business cycles in Ethiopia	19
Figure 2.2: GDP per capita contracting since 2016.....	20
Figure 2.3: Economic growth slowed since 2016	21
Figure 2.4: Patterns of sectoral GDP shares.....	22
Figure 2.5: Agriculture and industry contracting since 2016	24
Figure 2.6: Strong production linkages between agriculture and other sectors reversed in 2022	25
Figure 2.7: Forward production linkages falling since 2020.....	26
Figure 2.8: Social progress strongly enhanced with forward production linkages	27
Figure 2.9: Growing real aggregate demand constrained since 2019.	28
Figure 2.10: The dynamics of GDP share of components of aggregate demand	29
Figure 2.11: Increasing shortfall of output and inflationary trend since 2015.....	31
Figure 2.12: Output and price fluctuations with political business cycles in Ethiopia	32
Figure 2.13: Food inflation rising with increasing output deficit since 2016.....	33
Figure 2.14: Inflation was not demand-pull after 2018.....	34
Figure 2.15: Perceived adverse impacts of inflation on households...	35
Figure 2.16: Overall productive capacities index for Ethiopia in 2022	37
Figure 2.17: Slowed economic growth with stagnated productive capacities since 2016	39
Figure 2.18: Social progress strongly enhanced with productive capacities	40
Figure 2.19: Social progress strongly enhanced with human capital before GTPII	42
Figure 2.20: Human capital deteriorated with reduced government health expenditure	43

Figure 2.21: Social progress deteriorated with contracting natural capital	44
Figure 2.22: Natural capital rapidly eroded with reduced natural resource rents.....	45
Figure 2.23: Natural capital and forest area rapidly eroded	46
Figure 2.24: Natural capital contracting with deteriorating land rights and access during GTPII+	47
Figure 2.25: Social progress enhanced with energy capacity	48
Figure 2.26: Social progress strongly associated with transport capacity until 2018	49
Figure 2.27: Social progress strongly enhanced with ICT capacity ...	50
Figure 2.28: Social progress stagnated with contracting institutional capacity since 2018.....	51
Figure 2.29: Social progress improving with the expense of the private sector	52
Figure 2.30: Social progress stagnated with deteriorating change since 2019.....	53
Figure 3.1: GDP share of agriculture and allied activities	59
Figure 3.2: Agricultural real value added of (billion ETB).....	60
Figure 3.3: Agriculture value added per worker (at 2015 constant US%)	61
Figure 3.4: Absolute growth rate and GDP share of agriculture growth	62
Figure 3.5: GDP share of sub-sectors of agriculture	63
Figure 3.6: GDP share and labor force employment in agriculture in Africa and Ethiopia.....	64
Figure 3.7: GDP and agriculture share of the crop sub-sector	65
Figure 3.8: Total crop and grain crop per capita production (quintals)	66
Figure 3.9: Yield of cereals, pulses, and oilseeds yield (qt/ha)	68
Figure 3.10: Cereal, pulse and oilseed per capita production.....	69
Figure 3.11: Trends of vegetable, fruits, and root crops yield in Ethiopia	71
Figure 3.12: Trends of wheat yield in Africa and Ethiopia (qt/ha).....	72

Figure 3.13: Trends of maize yield in Africa, East Africa and Ethiopia	73
Figure 3.14: Share of livestock sub-sector in the agricultural and total GDP of the country	74
Figure 3.15: Share of livestock population (% share from total TLU)	76
Figure 3.16: Livestock TLU per capita trend	77
Figure 3.17: Trends of milk and meat per capita production	80
Figure 3.18: Trends of cow and camel milk yield in Ethiopia	81
Figure 3.19: Honey and egg production per capita trends in Ethiopia	82
Figure 3.20: Percentage share of egg from different poultry breeds	83
Figure 3.21: GDP contribution of forestry and fishery in Ethiopia	85
Figure 3.22: Growth rate of the fishing sector at constant prices	86
Figure 3.23: Percentage share of domestic and imported supply of major cereal crops	88
Figure 3.24: Total meat and milk supply per capita in Ethiopia	89
Figure 3.25: Dynamics of total arable land in Ethiopia (million ha)	91
Figure 3.26: Share of arable land from agricultural and total land area	92
Figure 3.27: Land allocated for grain crop production (million ha)	93
Figure 3.28: Total land and cropland holding of households in Ethiopia (ha)	94
Figure 3.29: Fertilizer consumption in Ethiopia (kg per ha)	95
Figure 3.30: Percentage of outstanding credit allowed for agriculture	97
Figure 3.31: Credit share of agriculture (% of total credit)	98
Figure 3.32: Households' response to the incidence of crop damage	100
Figure 3.33: Main challenges that reduce smallholders' crop production	101
Figure 3.34: Dynamics of hunger in Ethiopia	105
Figure 3.35: Hunger in Ethiopia is serious	106
Figure 3.36: Response of households regarding food availability in the last 12 months	108
Figure 3.37: Dynamics of households' response to shocks of food and income	110

Figure 3.38: Shocks that reduce food production and availability among rural households	111
Figure 4.1: GDP share and growth of manufacturing value added ..	132
Figure 4.2: Contribution of the manufacturing sector to GDP and export (million US\$).....	134
Figure 4.3: Competitive industrial performance (CIP) rank of Ethiopia	138
Figure 4.4: Manufacturing export per capita and share of manufacturing export, 2001-2021.....	140
Figure 4.5: Industrial export quality index.....	142
Figure 4.6: Input requirement of Ethiopian Manufacturing Industries	143
Figure 4.7: Constraints Facing Manufacturing Sector	154
Figure 5.1: Overall balance of payments deficit increasing for Ethiopia	163
Figure 5.2: Current account deficit increasing for Ethiopia	165
Figure 5.3: Capital account balance falling since 2014.....	166
Figure 5.4: Current account and capital account inversely associated in Ethiopia	167
Figure 5.5: The dynamics link between export and import values for Ethiopia	168
Figure 5.6: External trade contracting over the last decade	170
Figure 5.7: Dynamics of goods export shares for Ethiopia	171
Figure 5.8: Trends of service export shares	172
Figure 5.9: Imports and exports strongly reinforce each other.....	173
Figure 5.10: External trade contracting with poor economic management since 2017.....	174
Figure 5.11: Increasing number of products traded	175
Figure 5.12; Import and export diversification unchanged over the last 22 years	176
Figure 5.13; Top 10 export and import partners of Ethiopia.....	177
Figure 5.14: High and increasing export concentration since 2015 ..	178
Figure 5.15: Ethiopia's relative status in economic complexity.....	179

Figure 5.16: ECI and COI ranks for Ethiopia slightly improving until 2019.....	180
Figure 5.17: Trade deficit reduces with increasing economic complexity	183
Figure 5.18: Pattern of local currency depreciation and foreign reserves in Ethiopia	185
Figure 5.19: Total reserves rising with devaluation until 2018.....	186
Figure 5.20: External reserves (as a % of external debt) drastically falling since 2007	187
Figure 5.21: Exchange rate depreciation reducing current account deficit until 2020	189
Figure 5.22: Devaluation of local currency was inflationary in Ethiopia	190
Figure 5.23: Import of goods and services falling with devaluation of local currency	191
Figure 5.24; Exports of goods and service deteriorating with devaluation of local currency	192
Figure 5.25: Dynamics of globalization for Ethiopia.....	193
Figure 5.26: Very low and deteriorating economic globalization for Ethiopia	194
Figure 5.27: Economic and political globalization with opposing objectives.....	195
Figure 5.28: Economic globalization contracting with rising social globalization	196
Figure 5.29: Economic growth slowed with increased globalization	197
Figure 5.30: External trade weakly associated with economic globalization	198
Figure 5.31: Social progress strongly enhanced by political globalization	199
Figure 6.1: Growth rate of narrow and broad money supply (2001/02-2021/22)	212
Figure 6.2: Broad money supply (% GDP) in Ethiopia relative to SSA	213

Figure 6.3: Trends of broad money supply and its determinants	214
Figure 6.4: The trend of Headline, food, and non-food inflation	215
Figure 6.5: Growth of real GDP and broad money supply.....	216
Figure 6.6: Inflation and growth of broad money supply	217
Figure 6.7: Co-movement of non-food inflation and growth of broad money	218
Figure 6.8: Number of bank branches in Ethiopia	221
Figure 6.9: Population-bank branch ratio in Ethiopia	222
Figure 6.10: Number of insurance branches	223
<i>Figure 6.11: The number of MFI in Ethiopia</i>	<i>224</i>
<i>Figure 6.12: Index of access to financial institutions in Ethiopia.....</i>	<i>224</i>
Figure 6.13: Distribution of banking sector credit (% of total credit) (2018-2023).....	225
<i>Figure 6.14: Bank assets, loans & bonds, and deposits (billion ETB)</i>	<i>226</i>
Figure 6.15: Bank concentration in Ethiopia	227
Figure 6.16: Share of economic sectors in credit	232
Figure 6.17: RoE and RoA in Ethiopia and Kenya	233
Figure 6.18: Bank net interest margin in Ethiopia and Kenya	234
Figure 6.19: Cost-to-income ratio of the banking sector in Ethiopia and Kenya	235
Figure 6.20: Bank overhead costs to total assets in Ethiopia and Kenya	236
Figure 6.21: Financial institutions efficiency index	237
Figure 6.22: Selected indicators of financial inclusion (%), 2022 ...	240
Figure 6.23: Selected indicators of digital financial services (2022)	244
Figure 7.1: Nominal and real public revenue including grant (in billion birr).....	255
Figure 7.2: Tax and non-tax revenue collection of the country (in billion birr)	256
Figure 7.3: Real and nominal tax and non-tax revenue of the government in billion Birr	258
Figure 7.4: GDP share of tax revenue for Ethiopia.....	259

Figure 7.5: Tax collection efficiency of Ethiopia across years	260
Figure 7.6: GDP share of tax revenue in Africa (2021)	261
Figure 7.7: Trend of real total revenue and expenditure in billion birr	262
Figure 7.8: Government revenue and expenditure of Ethiopia.....	264
Figure 7.9: Fiscal deficit as a percent of GDP	266
Figure 7.10: Budget and very low and unchanged revenue diversification over the last 22 years	268
Figure 7.11: Overall actual fiscal deficit of Ethiopia, East Africa and SSA countries	269
Figure 7.12: Drastic growth of debt in Ethiopia since 2015.....	272
Figure 7.13: Government shifting to domestic sources of debt since 2018	273
Figure 7.14: Outstanding debt of Ethiopia in billion USD.....	275
Figure 7.15: Total debt outstanding by central government and SOEs in billion USD	276
Figure 7.16: Share of official and private creditors in the total outstanding debt	277
Figure 7.17: Public sector external debt outstanding by loan purpose in percentage.....	278
Figure 7.18: Public sector external debt outstanding by economic sectors (% of total external debt)	279
Figure 7.19: Debt service from central government and SOEs in Million USD.....	280
Figure 7.20: Share of debt service by the central government and SOEs in percent	281
Figure 7.21: Debt repayment to debt service ratio of Ethiopia.....	282
Figure 7.22: Principal and interest rate of the debt service (in million Birr)	283
Figure 7.23: Pattern of public debt to GDP ratio for Ethiopia	285
Figure 7.24: Trend of external debt to export and GDP ratio (in percentage)	286

Figure 7.25: Ratio of present value of external debt to GDP and export	288
Figure 7.26: External debt service-to-export and -revenue ratios	290
Figure 7.27: General government gross debt as percentage of GDP in Ethiopia and SSA	292
Figure 7.28: Debt rising with imprudent debt policy pursued since 2016.....	294
Figure 7.29: Total debt rising with imprudent fiscal policy since 2018	296
Figure 7.30: Slowed growth of aggregate output and demand with increasing debt since 2016.....	298
Figure 7.31: Debt policy rating of Ethiopia and other regional economies.....	299
Figure 7.32: Pattern of net ODA and aid in million current USD	301
Figure 7.33: Net ODA received per capita for Ethiopia and SSA (current USD)	302
Figure 8.1: Total working age population.....	316
Figure 8.2: Working age population by gender (%).....	317
Figure 8.3: Working age population by age group (%).....	318
Figure 8.4: Labor force participation rate (%) by age group	319
Figure 8.5: Labor force participation by age group.....	321
Figure 8.6: Labor force participation rate by sex	323
Figure 8.7: Reasons for not participating in the labor market	324
Figure 8.8: Reason for not participating in the labor force (Urban left and Rural-right panel).....	325
Figure 8.9: Employment and active population by age group.....	326
Figure 8.10: Economic dependency ratio by region.....	327
Figure 8.11: National employment by sector (%)	332
Figure 8.12: Urban employment by sector (%).....	333
Figure 8.13: Rural employment by sector (%)	334
Figure 8.14: Employment by occupation (%)	335
Figure 8.15: Educational attainment of employed labor force by sex (%).....	336

Figure 8.16: Unemployment rate by age group.....	337
Figure 8.17: Trends in the youth unemployment rate (%) (aged 15-24)	338
Figure 8.18: Trends in adult unemployment rate (%) (aged 25 and above).....	339
Figure 8.19: Educational attainment of unemployed labor force	341
Figure 8.20: Labor income as a percentage of GDP	342
Figure 8.21: Average monthly salary (2013-2021) in ETB.....	344
Figure 8.22: Gender wage gap by skill level (%).....	345
Figure 9.1: Poverty incidence curves by consumption expenditure and place of residence (2021/22).....	374
Figure 9.2: Lorenz and concentration curves of real consumption expenditure (2021/22).....	384
Figure 9.3: Pro-poor growth in Ethiopia	392
<i>Figure 9.4: Pro-poor growth in rural and urban Ethiopia</i>	<i>394</i>
Figure 9.5: Pro-poor growth in Afar region	395
Figure 9.6: Pro-poor growth in Amhara region.....	396
Figure 9.7: Growth policy in Oromia region was not pro-poor.....	397
Figure 9.8: Pro-poor growth in Somali region	398
Figure 9.9: Pro-poor growth in Benishangul Gumuz region	399
Figure 9.10: Pro-poor growth in SNNP region	400
Figure 9.11: Pro-poor growth in Gambella region	401
Figure 9.12: Growth policy in Harari region was not pro-poor.....	402
<i>Figure 9.13: Growth policy in Addis Ababa was not pro-poor.....</i>	<i>403</i>
Figure 9.14: Growth policy pursued in Dire Dawa was not pro-poor.....	404
Figure 10.1: The dynamics of policies and institutional quality in Ethiopia	417
Figure 10.2: Policies in Ethiopia were either contradictory or independent	420
Figure 10.3: Governance in Ethiopia rapidly deteriorating since 2020	421
Figure 10.4: Determinants of governance deteriorating since 2020	422
Figure 10.5: Dynamics of governance difficulty in Ethiopia	423

Figure 10.6: Pattern of governance performance in Ethiopia.....	424
Figure 10.7: Governance in Ethiopia strongly associated with consensus building.....	426
Figure 10.8: Consensus building in Ethiopia rapidly falling since 2020	427
Figure 10.9: Growth of conflict events in Ethiopia.....	428
Figure 10.10: Types of conflict events in Ethiopia (2023).....	429
Figure 10.11: Regional distribution of conflict events in Ethiopia (2023).....	430
Figure 10.12: Perceived causes of domestic conflicts and political instability in Ethiopia	431
Figure 10.13: Weak governance and flawed performance with rising conflicts since 2020	432
Figure 10.14: Perceived relevance of the TYDP by January 2024...	434
Figure 10.15: Perceived adverse effects of domestic conflicts and political instability in Ethiopia.....	435
Figure 10.16: Perceived costs of domestic conflicts on regional states of Ethiopia	436
Figure 10.17: Conflict events in Ethiopia are very fatal	437
Figure 10.18: Output growth stagnated with rising conflicts since 2019	438
Figure 10.19: Growth of aggregate demand falling with rising conflicts	440
Figure 10.20: Domestic debt rising with conflicts and political violence	441
Figure 10.21: Total unemployment rising with conflicts and political violence	443
Figure 10.22: Investments deteriorating with rising conflicts	445

TABLES

Table 2.1: Distribution of experts by level of education and gender....	9
Table 2.2: Distribution of experts by affiliation category	10
Table 2.3: Relative contributions of productive capacities in Ethiopia (2021-2022).....	38
Table 2.4: Productive capacity linkages in Ethiopia	41
Table 3.1: Livestock variety in the country	78
Table 3.2: Frequency of eating less food for 12 consecutive months	109
Table 4.1: Structure of Ethiopia's manufacturing sector.....	127
Table 4.2: Forms of ownership in the manufacturing sector	128
Table 4.3: Regional distribution manufacturing establishments	129
Table 4.4: Growth of the manufacturing sector	130
Table 4.5: Diversification into new products (2006-2021)	136
Table 4.6: New products exported, 2006-2021, by sectoral contribution and their complexity	137
Table 4.7: Share of imported raw materials for top ten manufacturing groups billions of ETB, 2020)	145
Table 4.8: Exports earnings of the top ten manufacturing industries, by industry group.....	147
Table 4.9: Structure of industrial parks in Ethiopia	148
Table 4.10: Number of jobs created by industrial parks	151
Table 4.11: Export performance of Ethiopia's IPs (Millions of USD)	152
Table 5.1: Exports and imports of product groups for Ethiopia (2021)	181
Table 5.2: Complexity of top 10 export products of Ethiopia (2021)	182
Table 5.3: Relative contributions of dimensions of globalization	194
Table 6.1: Components of broad money supply (million ETB)	211
Table 6.2: Correlation between broad money supply and inflation..	218

Table 6.3: Loan disbursement by clients (in millions of ETB)	228
Table 6.4: Value and share of banking loans by sector (billion ETB)	
.....	230
Table 6.5: Financial Inclusion in Ethiopia	239
Table 6.6: Usage of digital financial services in Ethiopia, Kenya, and SSA	243
Table 8.1: Employment by sector: Formal vs informal	329
Table 8.2: Private and government employment by residence	330
Table 8.3: Unemployment rate: urban vs rural	340
Table 9.1: Distribution of LSMS samples across waves and regions	360
Table 9.2: Adjustment of consumption expenditure for inflation	361
Table 9.3: Real consumption expenditure between the two waves ..	370
Table 9.4: Annual real consumption expenditure across regions	371
Table 9.5: Household welfare ratio across regions	372
Table 9.6: Shares of household consumption expenditure	373
Table 9.7: Real consumption expenditure per adult equivalent by quintiles	373
Table 9.8: Total absolute poverty rates across regions.....	376
Table 9.9: Absolute food poverty rates across regions.....	377
Table 9.10: Poverty rate by place of residence	378
Table 9.11: Depth of absolute poverty across regions (2021/22)	379
Table 9.12: Severity of absolute poverty across regions (2021/22) ..	380
Table 9.13: Relative contribution of regions to absolute poverty in Ethiopia.....	381
Table 9.14: Relative contribution of rural and urban areas to absolute poverty.....	381
Table 9.15: Poverty elasticity with respect to growth	382
Table 9.16: Regional distribution of inequality in Ethiopia	383
Table 9.17: Poverty elasticity with respect to inequality	385

Table 9.18: Total poverty elasticity with respect to growth and inequality	386
Table 9.19: Poverty effects of growth and redistribution by place of residence (2018/19-2021/22)	387
Table 9.20: Poverty effects of growth and redistribution across regions (2018/19- 2021/22)	389
Table 9.21: Pro-poor indices between 2018/19 and 2021/222 by place of residence	390
Table 9.22: Pro-poor indices between 2018/19 and 2021/22 across regions of Ethiopia	391
Table 10.1: Relative contribution of policies and institutional arrangements	416
Table 10.2: Policies in Ethiopia are inconsistent or independent	418
Table 10.3: Components of governance difficulty in Ethiopia.....	424

1. INTRODUCTION

The purpose of this chapter is to introduce the book. For ease of understanding, it first defines the concept of economic performance, its measurement, indicators, and evaluation. Then, the concepts of development policies and governance and their nexus with economic performance are described. Finally, it highlights the contents of all the chapters organized in the book.

Economic performance is defined in terms of success or failure to achieve predefined policy objectives. It can be measured by two groups of indicators: economic and stability indicators. Economic indicators include measures of macroeconomic performance such as economic growth and aggregate output (GDP and GDP per capita), aggregate demand and its four components (private and government expenditures, investment, and net exports), employment, and international trade.

Measures of economic stability, on the other hand, include central government budgets, prices, money supply, and the balance of payments (BoP). The macroeconomic policy objectives for Ethiopia are expected to include such economic policy objectives. Economic performance can be evaluated in terms of the achievement of these policy objectives. It is determined by the success or failure of a government to achieve such objectives.

Accurate measurement is necessary for evaluation of economic performance and macroeconomic policies implemented by the government. The economic performance of a country can mainly be determined by factors (capital, labor, and human capital) accumulation and other productive capacities. Higher inputs and productive capacities lead to higher outputs. Productive resources, entrepreneurial capabilities, and production linkages determine the capacity of a country to produce goods and services and enable it to grow and

develop. Productive capacities and social-economic progress are strongly associated. Productive capacities drive the overall development of nations.

Economic performance is affected by development policies and governance. Stated differently, the success and failure of a country to achieve development objectives is affected by the quality of development policies and institutional arrangements. Imprudent policies and institutional arrangements can lead to failure or poor economic performance. The alignment between economic policies and economic management policy significantly affects overall socioeconomic progress of a nation.

Economic performance is also affected by the governance difficulty prevailed in the country and the governance permanence of the political leadership (Bertelsmann Stiftung, 2022)¹. Intensity of conflicts, civil society traditions, and structural constraints determine governance difficulty. Efficient use of available resources, steering capability, consensus building with other actors, and international cooperation by the political leadership determine governance performance. On the other hand, high levels of governance difficulty, weak steering capability, resource inefficiency, lack of consensus building, and weak international cooperation are associated with poor economic performance.

The Ethiopian government had identified key areas of development problems and articulated them in the Ten-Years Development Plan (TYDP) (2021-2030) and the Home-grown Economic Reform Agenda

¹ Bertelsmann Stiftung (2022), BTI 2022 Codebook for Country Assessments, available at https://bti-project.org/fileadmin/api/content/en/downloads/codebooks/BTI2022_Codebook.pdf

(HGER) (FDRE, 2020, 2021)². The TYDP, being implemented since 2021, has six central objectives that are supposed to address the key development challenges of the nation by 2030³:

1. *Creating a pragmatic market-based economic system with enhanced role of the private sectors.*
2. *Maintaining macroeconomic stability, ensuring rapid and sustainable economic growth, and creating decent jobs.*
3. *Ensuring structural economic transformation by promoting overall productivity and competitiveness.*
4. *Creating an enabling socioeconomic and political environment and equitable access to citizens by ensuring the quality and accessibility of basic social services and the provision of infrastructure.*
5. *Ensuring a competent, independent, and quality civil service system by building the capacity of the government and establishing good governance.*
6. *Building strong and inclusive institutions that would ensure peaceful society, access to justice and upholding the rule of law and human rights.*

Economic reforms are expected to translate into action through policies that enhance the supply side of the economy. The focus of the HGER agenda is the enhancement of productivity and competitiveness of the

² FDRE (Federal Democratic Republic of Ethiopia (2021), Ten Years Development Plan: A Pathway to Prosperity (2021-2030). Planning and Development Commission.

FDRE (2020), A Homegrown Economic Reform Agenda: A Pathway to Prosperity, Planning and Development Commission.

³ Because it is too early to evaluate the achievement of the TYDP, this report does not evaluate the objectives of the plan.

overall economy, and a gradual transition from public to private sector-led growth. As a result, a stable macroeconomy will be ensured and the economy will be able to generate adequate jobs to arrest the rampant unemployment and the inflationary pressure. The HGER agenda comprises macroeconomic reforms, sectoral reforms, and structural reforms.

To realize its development objectives, Ethiopia requires prudent policies, institutions, and governance. In this book, the performance of the Ethiopian economy is evaluated against the objectives, policies formulated and implemented, and the state of governance prevailed over the last two and half decades (2001-2024).

In addition to evaluation of the state of economic performance in terms of the above indicators, the book investigates the dynamic and systematic link between the macroeconomic aggregates and generates important implications on the trends, prudence, relevance, and internal consistency of policy making and implementation across planning periods in Ethiopia. To draw lessons for Ethiopia, international experiences are also identified and benchmarked.

Including this introduction, the book is organized in ten chapters each treated at the expected coverage and depth of analysis and argument.

Chapter 2 investigates the dynamics of aggregate supply and demand, the macroeconomic imbalance, and the productive capacities of the country to produce goods and services. It assesses the dynamics of aggregate output and macroeconomic instability; estimates aggregate demand and the output/supply deficit; examines the dynamics of all productive capacities; identifies the factors constraining and stagnating productive capacities; assesses the state of production and growth linkages between sectors; and measures the nexus between socioeconomic progress and productive capacities.

Chapter 3 assesses the performance of agriculture and allied activities. It specifically examines the performance of subsectors of agriculture including crops, livestock, and other subsectors. It also investigates the supply of agricultural products, input use, food supply, food security and hunger, and identifies the binding constraints.

Chapter 4 is devoted to the assessment of the industrial sector with a specific focus on manufacturing. The industrial policies pursued, overall structure and performance of the industrial sector, international competitiveness, manufacturing inputs, the state and role of industrial parks, and factors constraining the manufacturing sector are investigated.

Performance of the external sector is reported in Chapter 5. The dynamics of balance of payments (BoP), trade performance, trade diversification and concentration, and the relative economic and product complexity (diversity and uniqueness) of exports are examined. The dynamics of depreciation/ devaluation of the local currency, and globalization and their impacts on the major macroeconomic aggregates are examined and policy implications synthesized.

Performance of the financial sector is assessed and reported in Chapter 6. Monetary developments including monetary policy, money supply, and inflation are investigated. Monetary developments in the financial markets such as efficiency and profitability of the banking sector, and the state of financial inclusion and digital finance are investigated and reported.

Chapter 7 covers fiscal developments over the years. The dynamics of government revenue and expenditure, fiscal balance, public debt outstanding, debt service and vulnerability, official development assistance (ODA) and aid, the shift between external and domestic debt, and fiscal policy are examined. The dynamic and systematic link

between debt and economic growth is measured and the policy implications synthesized.

The state of the labor market in Ethiopia is examined and reported in Chapter 8. The population and labor force policies, trends of the labor force, and employment and unemployment are assessed at regional and federal levels. The wage rate policy and the need for minimum wage rate in Ethiopia is also investigated.

Chapter 9 rigorously treats the dynamics of economic welfare at household level using the latest two panel surveys of the Living Standards Measurement Study (LSMS). The incidence, depth, and severity of poverty, and inequality are estimated at national and regional levels. Pro-poor growth policies pursued at regional and national levels, and in rural and urban areas are also identified.

Finally, Chapter 10 investigates the dynamics of development policies, institutions, and governance. Ethiopia's governance status, governance performance of the political leadership, and determinants of governance are investigated. The dynamics of domestic conflicts and political instabilities are also examined. The perceived and revealed causes and impacts of domestic conflicts and political instabilities on development outcomes are measured and reported.

2. AGGREGATE OUTPUT AND PRODUCTIVE CAPACITIES

2.1. Introduction

Macroeconomic imbalances or the disruption of economic situations often occur at the macroeconomic level. Depending on the level they occur, macroeconomic imbalances can have devastating effects on the economy. The balanced macroeconomic situation may include full employment, sustainable growth, and price stability. Macroeconomic instability occurs when the price level fluctuates, unemployment increases, and the economy produces less output. It occurs with a deviation in the economy from its equilibrium level, often causing distortions in the market.

The Ethiopian economy has been seriously challenged by macroeconomic instability widely prevailing since 2015. The mismatch between aggregate output/supply and demand has particularly caused high and persistent inflation in Ethiopia. There are different and opposing assertions on the causes and drivers of macroeconomic instability in Ethiopia. The government firmly asserts that macroeconomic instability was caused by the fast-growing economy and the associated growth in the demand side that was caused by the growth of per capita income of citizens. Others believe imprudent macroeconomic policies pursued by the government as the primary reasons behind the current macroeconomic instability.

Despite such differentiated assertions, the Ethiopian economy has undergone substantial progress over the last two decades. Aggregate output was growing, leading to output surplus and stable prices for several years until aggregate demand surpassed aggregate output since 2015. The mismatch between aggregate output and demand has led to huge deficits that have caused serious macroeconomic instability and

high and persistent inflation that has significantly eroded the welfare of citizens.

The productive capacity of the country to produce more goods and services has been improving for several years. However, many productive capacities and the overall capacity of the nation were seriously eroded, constrained, or stagnated in recent years, leading to limited capacity to produce and supply goods and services. Rapid deterioration of natural capital, the missed capacity of the private sector to produce, and the misalignment of production linkages have particularly led to limited production and supply of outputs and demographic pressure as currently reflected by the domestic conflicts and political instabilities widely prevailed in the country.

This chapter investigates the dynamics of aggregate supply and demand and the productive capacities of the nation to produce goods and services. It is specifically aimed at addressing the following objectives:

- a. Asses the dynamics of aggregate output and macroeconomic instability.
- b. Estimate aggregate demand and the output/supply deficit.
- c. Examine the dynamics of capacities of the nation to produce goods and services.
- d. Identify the factors constraining and stagnating productive capacities.
- e. Assess the dynamics of production and growth linkages between sectors; and
- f. Assess the nexus between socioeconomic progress and productive capacities.

2.2. Methodology

2.2.1. Datasets

Both primary and secondary data were utilized. A perception survey was conducted to obtain information about the perception of economists on the state of the Ethiopian economy. The survey was conducted involving 310 EEA members around the world. The survey was conducted for two weeks, from January 1, 2024, to January 15, 2024) (Table 2.1). Around 89% of the respondents have a master’s and above level of education (Table 2.2). They are expected to understand the performance of the Ethiopian economy and their expert opinion to be relevant.

Table 2.1: Distribution of experts by level of education and gender

Educational level	Frequency by gender			Proportion (%)
	Male	Female	Both	
Master’s degree	204	9	213	68.7
PhD	62	2	64	20.6
Bachelor’s degree	21	7	28	9.0
Other	2	3	5	1.6
Total	289	21	310	100.0

Source Compiled from expert survey data (2024)

The professional experiences of the experts are also diverse, serving different specializations in economics requiring differentiated expertise (Table 2.2). They are expected to understand the various sectors of the economy. Over half of the experts (51.6%) are involved in economics research at universities and research institutions.

Table 2.2: Distribution of experts by affiliation category

Affiliation	Frequency	Proportion (%)
University	134	43.2
Research organization	26	8.4
Public service	38	12.3
Banking and finance	39	12.6
NGO/CSO	22	7.1
Private business	32	10.3
United Nations	5	1.6
Other	24	4.5
Total	310	100.0

Source Compiled from expert survey data (2024)

Moreover, secondary data on important macroeconomic aggregates and other indicators were collected from the following official sources:

- National Bank of Ethiopia (NBE)
- United Nations Conference on Trade and Development (UNCTAD)
- The World Bank Group
- United Nations development Program (UNDP)
- Millenium Challenge Corporation (MCC)

2.2.2. Methods of data analysis

Nonparametric methods were mainly employed to analyze the data. Timeseries line plots, pairwise correlations, and scatterplots were widely used to investigate the dynamics, and systematic link or association between macroeconomic aggregates.

Aggregate demand was estimated from data in the National Bank of Ethiopia (NBE). The expenditure approach was employed to estimate aggregate demand as the sum of private or household consumption (C), business investment (I), government spending (G) and net exports (x-m):

$$Y = Y_{ad} = C + I + G + (X - M)$$

This national income equation represents the difference between the nation's overall income (the aggregate value of goods and services produced in a certain period) (Y) and the overall national expenses (Y_{ad}). The equation holds that aggregate output (or aggregate income) is equal to aggregate demand, which in turn is equal to the sum of the four components (consumer expenditure⁴, investment, government spending, net exports). The nominal aggregate demand estimated from the four components was adjusted by the GDP deflator to compute the real aggregate demand that is comparable to the real aggregate output (or real GDP) computed by the NBE.

To estimate the importance of each source or component, aggregate variables such as aggregate output, aggregate demand, productive capacities, and structural change treated in this chapter can be decomposed using regression-based decomposition methods. In this method, aggregate variables are decomposed by their predicted components. The decomposition technique estimates models of the total of an aggregate variable as a function of covariates or sources of variation and predicts the contribution of each covariate, the constant, and of the residual to the total variation. The contribution of sources to

⁴ Final consumption expenditure consists of expenditure incurred by resident units (households) and institutional units, or non-profit institutions serving households (NPISHs), sector of general government) on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community (World Bank, 2024). It is all the spending on directly satisfying human needs and wants.

the aggregate variable is shown by decomposing the total variation by the predicted contributions of sources. There are two approaches for the decomposition of an aggregate variable by sources: the Shapley approach based on the expected marginal contribution of sources, and the Analytical approach based on algebraic developments that express total variation as a sum of the contributions of sources.

Suppose the aggregate variable is y and set of sources or covariates $X = \{x_1, x_2, \dots, x_k\}$, using a linear model specification, we can have (Araar & Duclos, 2008):

$$y = X'\beta + \varepsilon$$

Where β and ε , respectively, denote the coefficients (contributions) to be estimated and the error term.

Decomposing total variation with the analytical approach assumes that the aggregate variable is the horizontal sum of variations contributed by each source. Accordingly, the contributions of all the sources, the constant, and the residual add up to one.

2.2.3. *Definition of variables*

Productive Capacities: Productive capacities can be defined as “the productive resources, entrepreneurial capabilities and production linkages, which together determine the capacity of a country to produce goods and services and enable it to grow and develop” (UNCTAD 2024).

Human Capital: Human capital captures the education, skills and health conditions possessed by the population, and the overall research and development integration through the number of researchers and expenditure on research activities. The gender dimension of human capital is reflected by the fertility rate which at each increase reduces human capital score.

Natural Capital: Natural capital estimates the availability of extractive and agricultural resources, including rents generated from the extraction of natural resources, less the cost of extracting the resources.

Land Rights and Access: This indicator assesses the extent to which the institutional, legal, and market framework provides secure land tenure and equitable access to land in rural areas (MCC, 2024). It is measured by four subcomponents: (1) the effectiveness of the land tenure system; (2) the effectiveness of land markets; (3) the equitable management of communal lands; and (4) the existence of gender-based impediments to access.

Forest Area (% of total land area): Forest area is land under natural or planted stands of trees of at least 5 meters in situ, whether productive or not, and excludes tree stands in agricultural production systems and trees in urban parks and gardens.

Transport: Transport measures the capability of a system to take people or goods from one place to another. It is the capillarity of roads and railways network, and air connectivity.

Energy: Energy measures the availability, sustainability, and efficiency of power sources. It captures the use and access to energy, losses in distribution and renewability of energy components and sources, the GDP generated by each unit of oil as a measure for optimal energy systems.

Energy Intensity: This indicates how much primary energy, in megajoules (MJ), is needed to produce one unit of gross domestic product (GDP).

Information and Communication Technology (ICT): ICT estimates the accessibility and integration of communication systems including fixed line and mobile phones users, internet accessibility and server security.

Institutions: Institutions measure political stability and efficiency through their regulatory quality, effectiveness, success in fighting criminality, corruption and terrorism, and safeguard of citizens' freedom of expression and association.

Private Sector: Private sector is measured by the ease of cross-border trade (including time and monetary costs to export and import), and the support to business in terms of domestic credit, velocity of contract enforcement and time required to start a business.

Structural Change: Structural change refers to the movement of labor and other productive resources from low-productivity to high-productivity economic activities. This shift is captured by the sophistication and variety of exports, the intensity of fixed capital and the weight of industry and services on total GDP. It can also happen within a given sector provided that binding constraints in a particular sector are identified and effectively addressed.

Production Linkage: Production linkage is the interconnection of industries or sectors with other industries or sectors. A production linkage could be forward or backward.

Forward Linkage: Forward production linkage is the interconnection of an industry or sector to other industries or sectors to which it sells its output. An industry or a sector is said to have significant forward linkages when a substantial amount of its output is used by other industries or sectors as intermediate inputs to their production.

Backward Linkage: Backward linkage is the interconnection of an industry or sector to other industries from which it purchases its inputs to produce its output. An industry or a sector is said to have significant backward linkages when a substantial amount of its input is supplied by other industries or sectors as primary inputs to their production.

Natural Resource Rents (% of GDP): Total natural resources rents are the sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents. Rent is a surplus value after all costs and normal returns have been accounted for. The estimates of natural resources rents are calculated as the difference between the price of a commodity and the average cost of producing it. Scarcity rent is the cost of "using up" a finite resource because benefits of the extracted resource are unavailable to future generations. Efficiency is achieved when the resource price, the benefit society is willing to pay for the resource today, is equal to the sum of marginal extraction cost and scarcity rent.

Human Development Index (HDI): The HDI measures a nation's health, education, and standard of living. It has been published by the United Nations Development Program (UNDP) since 1990 covering 197 countries and economies around the world. Corruption is expected to adversely affect the social progress of nations measured by the HDI.

Fertility Rate (births per woman): Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.

Government Health Expenditure (% of GDP): Current health expenditure as a share of GDP provides an indication on the level of resources channeled to health relative to other uses. It shows the importance of the health sector in the whole economy and indicates the societal priority which health is given measured in monetary terms.

2.3. Aggregate Output

Aggregate output is an important measure of the total productivity (or GDP) of an economy. The output performance of the Ethiopia economy over the past 22 years can be viewed in three planning periods (Figure 2.1). Before the start of the Growth and Transformation Plan (GTP)

(pre-GTP), the Ethiopian economy was growing at an increasing rate until 2007 and reached a real GDP of US\$ 74 billion. This accelerated economic growth has made Ethiopia one of the fast-growing economies in the world. However, this rapid growth was slowed between 2007 and 2010 until the first GTP (GTPI) was launched. The GTPI was instrumental to maintaining the previous accelerated growth until it was stagnated by the domestic conflicts and political violence widely prevailed in 2016 (at a real GDP of US\$ 71.3 billion).

The period for GTP II and beyond (GTPII+) was the period of stagnation when real GDP was rapidly falling to reach the minimum at US\$ 46.3 billion in the 2021/22 fiscal year. The incumbent regime that came into power in 2018 was not able to reverse the decline and maintain the rapid economic growth experienced in Pre-GTP and GTPI periods. This drastic and consistent decline in real GDP coupled with the domestic conflicts and political instabilities is expected to lead to overall economic recession or contraction.

Business cycles are often caused by fluctuations in effective demand or purchasing power and investment, variations in government spending, macroeconomic policies, money supply, cyclical changes in weather, and psychological factors. Business cycles can also be caused by external factors such as war, technological shocks, natural factors, and population growth. Business cycles⁵ could be minor or short-term (taking about 3 years), Kuznets cycles (7-11 years), major or long

⁵ Major cycles, also known as Kitchin cycles, are the regular 40-months fluctuations in prices, production, and employment. The major cycle or the long Jugler cycle, refers to the period of prosperity, crisis, and liquidation following each other. Kuznets cycle refers to the secular swing of cycles occurring in 7-11 years. Building cycles are those business cycles taking place in the building construction activities.

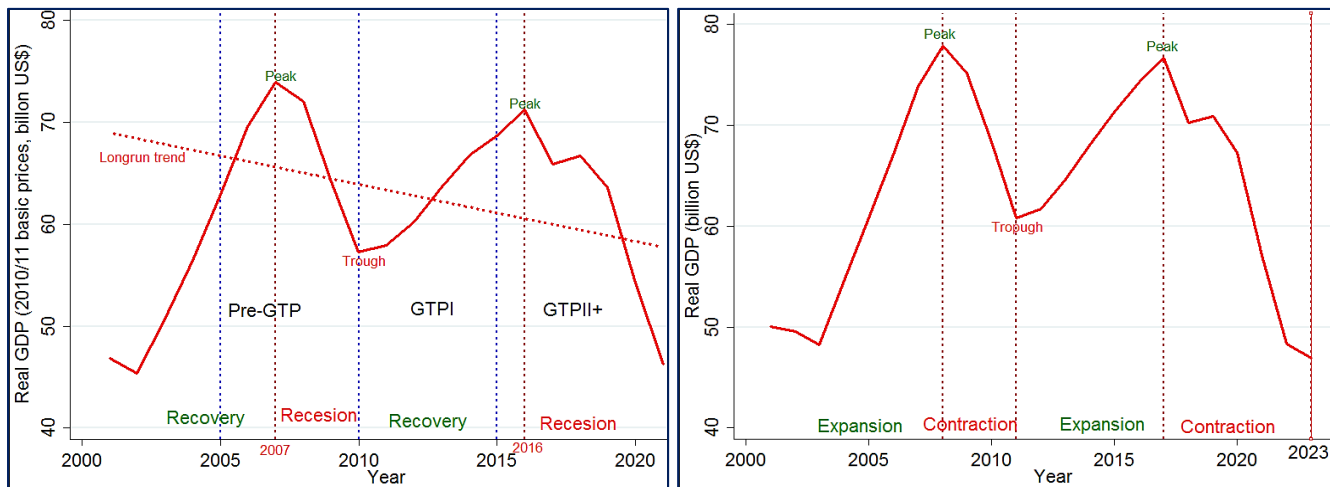
cycles (9-10 years), building cycles (15-20 years), or very long cycles (over 50 years)

The business cycle in the Ethiopian economy is associated with government spending and economic policies pursued during national elections. Over the last two decades, there have been four national elections conducted in 2005, 2010, 2015, and 2021 (see the blue vertical broken reference lines).

- The business cycles in Ethiopia are political. Incumbent administration manipulates the economy to increase its chances of re-election using expansionary pre-election policies and contractionary post-election policies. To improve prospects of the incumbent regime getting reelected, the economy is stimulated just before the general election.
- The duration of the political business cycle in Ethiopia takes two election periods (10 years), known as major or long cycles.
- The long-term growth effect of these business cycles was negative.
- After the 2005 national election, rapid economic growth was maintained for about two years.
- However, after 2007, the economy was contracting until the 2010 national election.
- After the 2010 election, the economy started to boom until the 2015 national election.
- After the 2016 election (a year after the 2015 election), the economy has been contracting until the 2021 national election.
- The contractionary process was not reversed after the 2021 election (right panel of the figure).
- The business cycles estimated from the data in the NBE (left panel of the figure) and the World Bank (right panel of the figure) are consistent.

- The results enable us to conclude that government expenditure and policies pursued during the national elections might have caused political business cycles that led to declining long-run growth trends in Ethiopia.

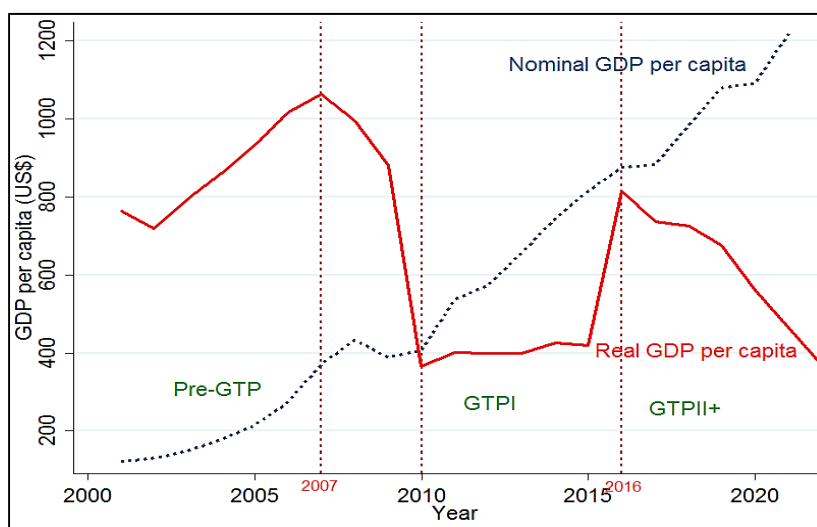
Figure 2.1: Real GDP and political business cycles in Ethiopia



Source: Computed from data in the NBE (2001-2022) and the World Bank (2001-2023)

The pattern of nominal and real GDP per capita over the past 22 years reveals the substantial disparity between the nominal and real values (Figure 2.2). Prices were stable or very low until 2010. After 2016, however, prices in Ethiopia were consistently rising and eroding the welfare of citizens. Real GDP per capita was drastically falling after 2016, dropping from US\$ 1,063 in 2007 (nominal value of US\$ 307.7) to US\$ 368 (nominal value of US\$ 1,218) in 2021/22 fiscal year.

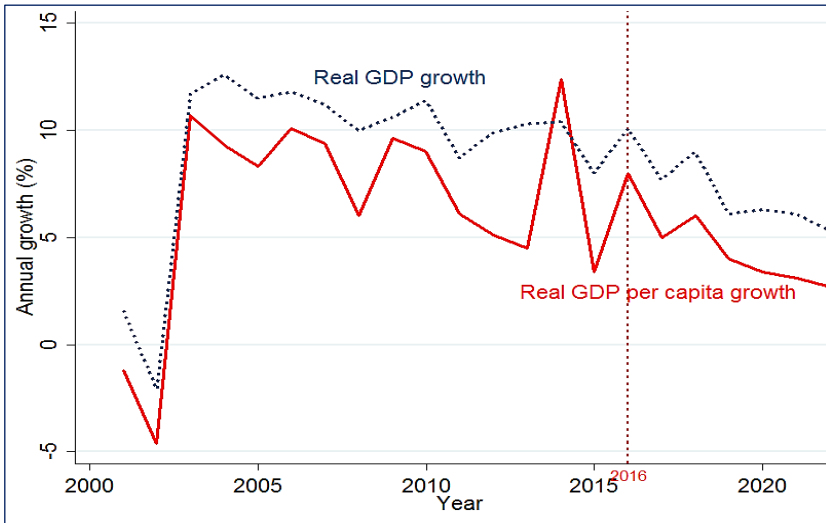
Figure 2.2: GDP per capita contracting since 2016



Source: Computed from data in the NBE (2001-2022)

The rapid growth of real GDP and GDP per capita started to slow down since 2016 (Figure 2.3). Slow and stagnant economic growth registered in recent years might have stagnated the economy, leading to overall economic decline. The structural and institutional bottlenecks need to be identified to maintain rapid economic growth experienced before 2016.

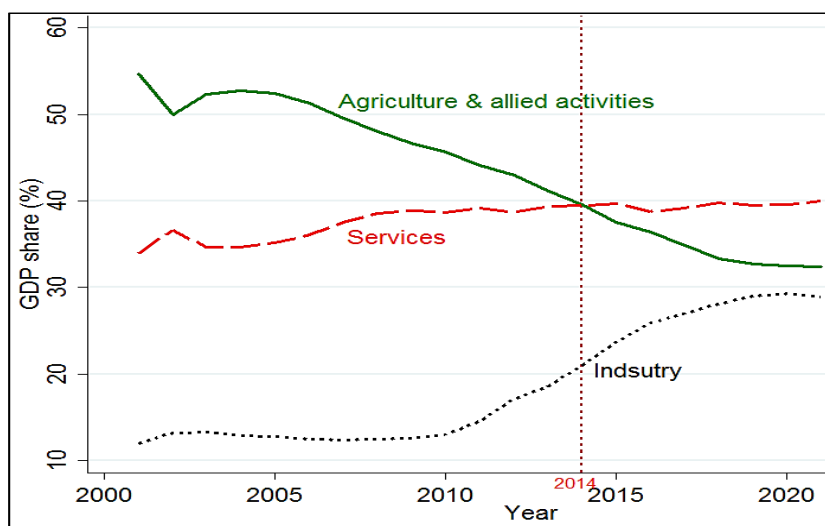
Figure 2.3: Economic growth slowed since 2016



Source: Computed from data in the NBE (2001-2022)

Over the last two decades, the Ethiopian economy has shown rapid structural change in which the GDP share of agriculture reduced and that of the other two sectors (industry and services) increased (Figure 2.4). The service sector has taken the lead and dominated the economy since 2014. The share of the industrial sector was by far lower than the share of the other two sectors. GDP share of agriculture and allied activities decreased from 54.5% in 2001 to 32.4% in 2022/23. The industry and the service sectors, respectively, increased from 12% and 34% in 2001 to 28.9% and 40% in 2021/22.

The service-led economy is expected to have caused growth of aggregate demand and the associated inflationary trend in Ethiopia. However, the growth of GDP share of the industrial sector seems to have stagnated over the last three years. To maintain the expected structural change, structural constraints (such as conflicts and political instability) stagnating the movement of labor from agriculture to the other two sectors should be addressed.

Figure 2.4: Patterns of sectoral GDP shares

Source: Computed from data in the NBE (2001-2022)

2.4. Production Linkages

The intersectoral production linkages (depicted in Figure 2.5) showed clear structural shifts over the past 22 years. The long-run dynamic link between agriculture and industry value-added plotted in the first panel of the figure shows three medium-term dynamics related to the planning periods of the Growth and Transformation Plan (GTP)⁶ and the associated economic policies⁷ pursued. Over the past 22 years, the sectoral value added between agriculture and industry has several

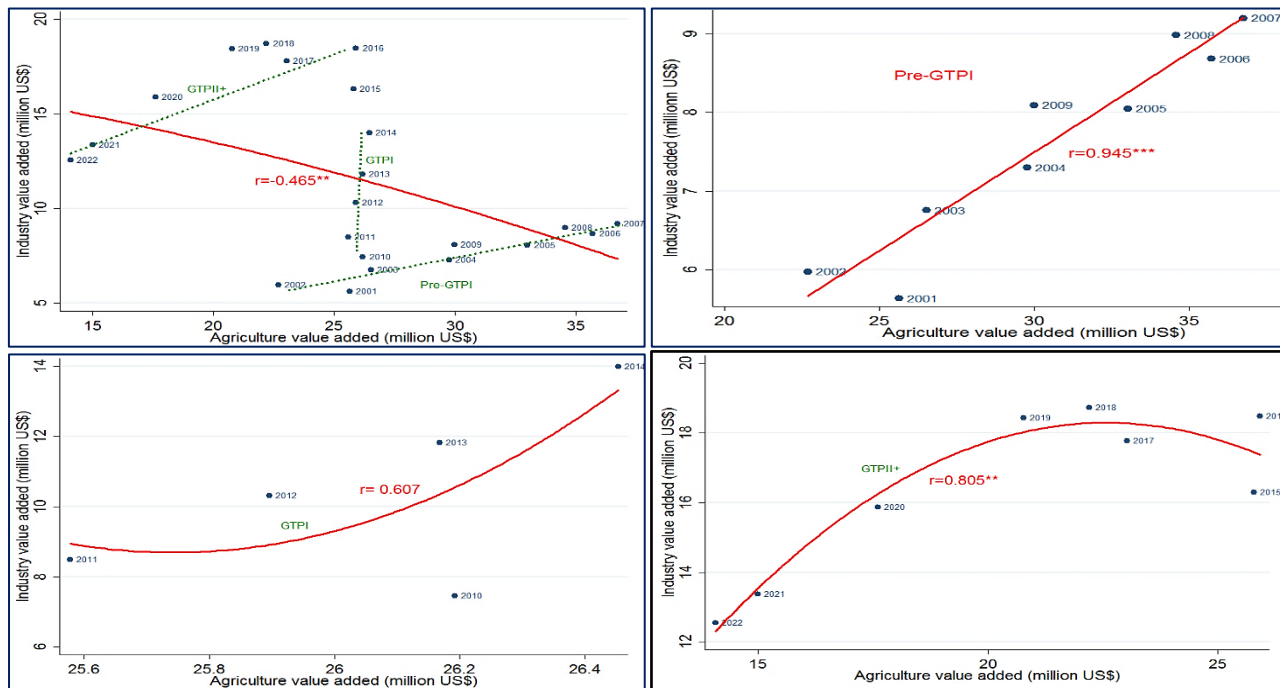
⁶ The planning periods for GTPI and GTPII are 2010/11-2014/15 and 2015/16-2019/20, respectively. GTPII+ includes GTPII and the period after then. Pre-GTPI covers the period before first GTP.

⁷ The systematic growth linkage between agriculture and the service sectors is like the pattern observed with the industry sector.

policy implications verified by the other three panels of the figure depicting the link in the separate planning periods.

- In the long run, there are substantial forward production linkages between agriculture and industry that are expected during the process of economic growth.
- There were strong positive contemporaneous forward production linkages between agriculture and industry before the GTPI and during GTPII.
- There have not been significant production linkages between agriculture and industry during GTPI.
- Both agriculture and industry have been contracting since 2016.

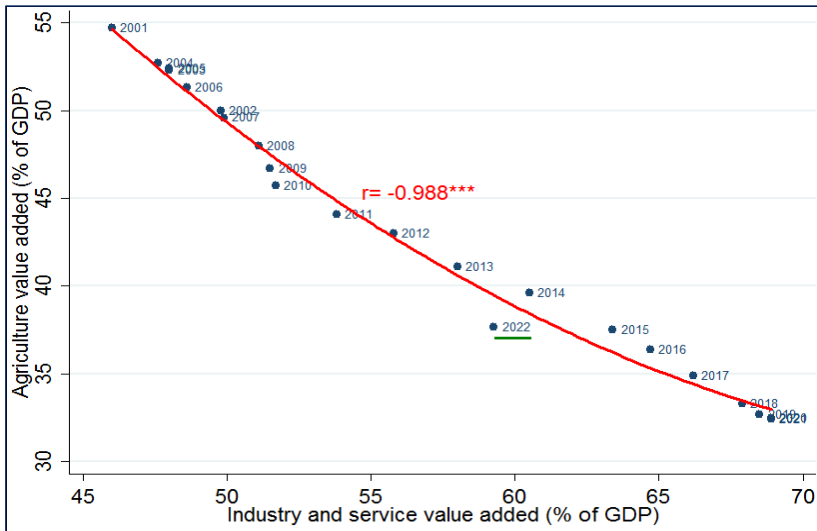
Figure 2.5: Agriculture and industry contracting since 2016



Source: Computed from data in the NBE (2001-2022)

There have been substantial production linkages between agriculture and other two sectors of the Ethiopian economy over the last two decades (Figure 2.6). The GDP share of agriculture was substantially reduced from 55% in 2001 to 32% in 2021/22. Changes in technologies, use of factor inputs, resource endowments, and political landscape are expected to be the primary drivers. Production linkages were accelerated until they were reversed in 2022. In 2022, production linkages were reversed to the level it was during GTPI. This might be associated with the domestic conflicts and political instabilities prevailed in Ethiopia, which will be discussed in the later chapters of the book.

Figure 2.6: Strong production linkages between agriculture and other sectors reversed in 2022

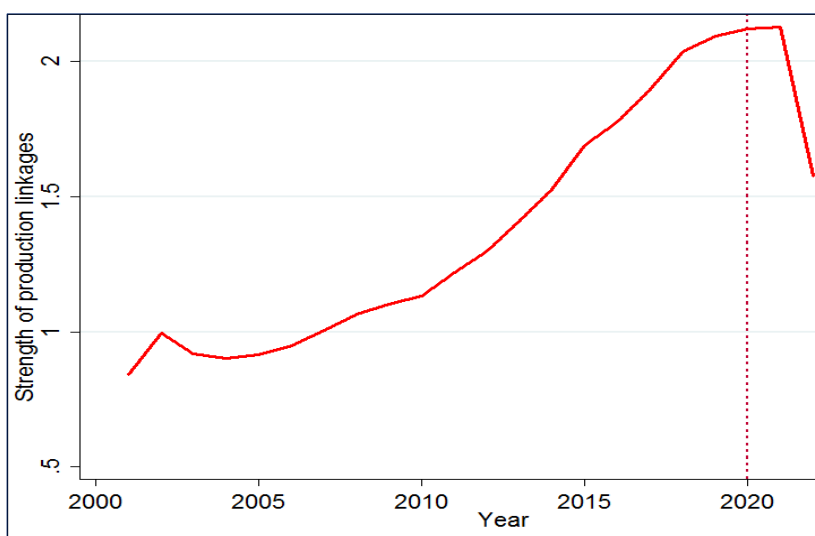


Source: Computed from data in the NBE (2001-2022)

The long run trend of production linkages between agriculture and the other two sectors was very strong until 2020 (Figure 2.7). In 2020, a

unit percentage rise in the industrial and service value added (% of GDP) was associated with a 2.1% fall in the agriculture value added, signifying the forward linkage was increasing with a decreasing rate. However, the production linkage was constrained and started to drastically fall in 2020. This might mainly be associated with the domestic conflicts and political instability severely affecting all the sectors.

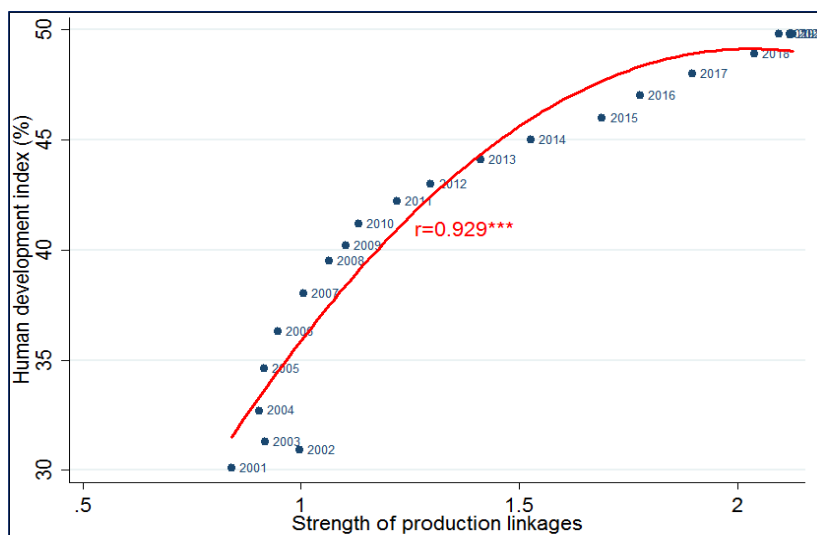
Figure 2.7: Forward production linkages falling since 2020



Source: Computed from data in the NBE (2001-2022)

Social progress in Ethiopia was strongly enhanced by the production linkages the economy has experienced over the last two decades (Figure 2.8). Production linkages between agriculture and the other two sectors (industry and services) were consistently increasing until it stagnated in 2020.

Figure 2.8: Social progress strongly enhanced with forward production linkages



Source Computed from data in the NBE and UNDP (2001-2022)

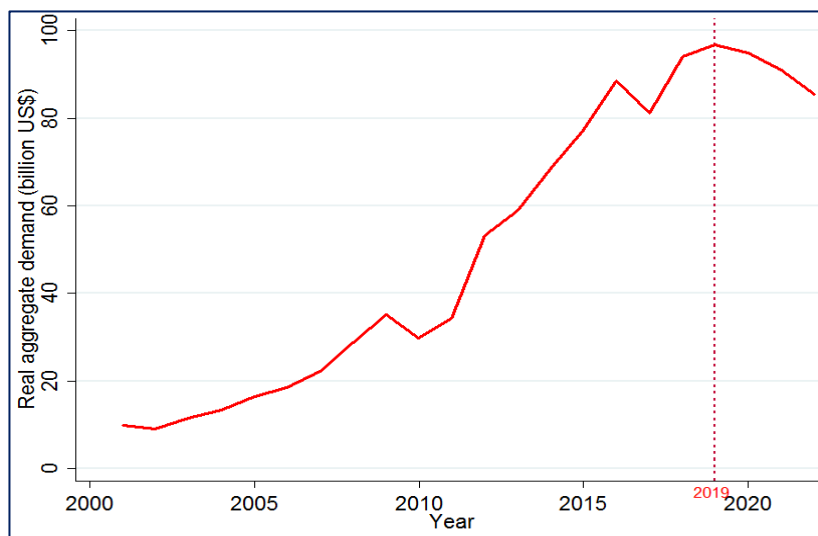
2.5. Aggregate Demand

Aggregate demand measures the total demand for all finished goods and services produced in an economy. It is commonly expressed as the total amount of money exchanged for goods and services at a specific price level and point in time. It is computed by adding its four major components (private consumption expenditure, investment expenditure, government spending, and net exports). Aggregate demand can be affected by several macroeconomic aggregates, including interest and exchange rates, foreign direct investment (FDI), inflation expectations, and economic conditions.

Aggregate demand for goods and services in Ethiopia has shown rapid and consistent growth until 2019 (Figure 2.9). The rapid economic growth registered over the period is one of the factors enhancing income

per capita and the purchasing power of citizens that might have gradually caused inflationary trends. Aggregate demand was consistently growing from about US\$ 8.8 billion in 2001 to US\$ 82.8 billion in 2022, which is nearly eightfold growth. After 2019, however, aggregate demand started to fall mainly due to the domestic conflicts and political instabilities widely prevailed in the country.

Figure 2.9: Growing real aggregate demand constrained since 2019



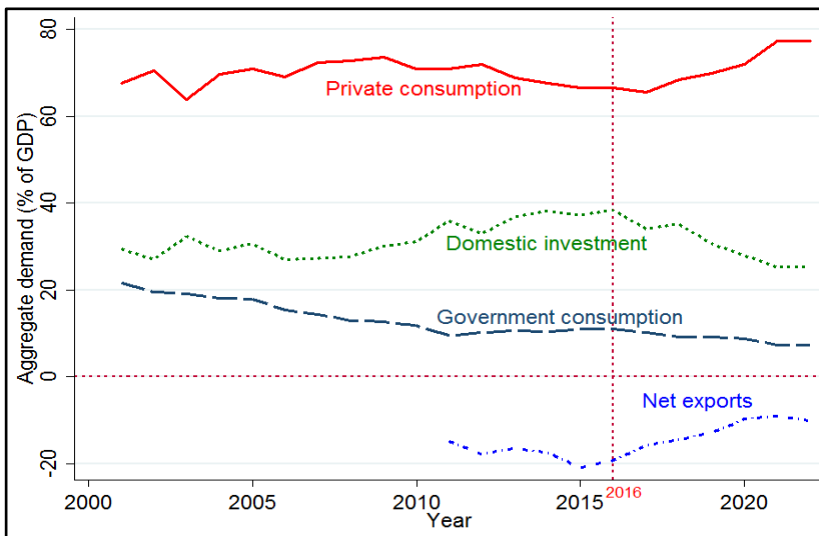
Source: Computed from data in the NBE (2001-2022)

The dynamics of the four components of aggregate demand for Ethiopia over the last 22 years have several implications (Figure 2.10).

- Private consumption has the largest GDP share of aggregate demand. It increased from 67.6% of GDP in 200 to 77.4% of GDP in 2021/22.
- Gross domestic fixed investment, the second largest GDP share, decreased from 29.4% of GDP in 2001 to 25.3% of GDP in 2021/22. However, it has been rapidly contracting since 2016.

- Government consumption expenditure decreased from 21.7% of GDP in 2001 to 7.4% of GDP in 2021/22. Compared to the size of the economy, the government expenditure has been substantially decreasing.
- Deficit in net exports decreased from 13.5% of GDP in 2001 to 10.1% of GDP in 2021/22. It has been slightly improving since 2019.

Figure 2.10: The dynamics of GDP share of components of aggregate demand



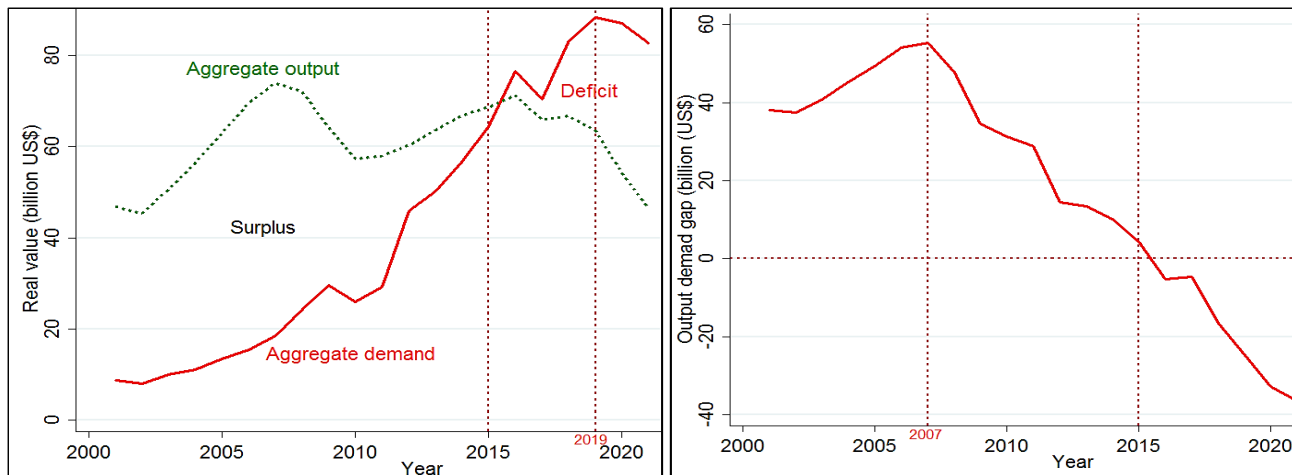
Source: Computed from data in the NBE (2001-2022)

2.6. Macroeconomic Instability

Macroeconomic instability is the economic condition when prices fluctuate, unemployment increases, and the economy produces less output. It occurs with macroeconomic imbalances often causing market distortions. The imbalance between real aggregate output and demand in Ethiopia reveals several adverse economic effects (Figure 2.11):

- Aggregate output nearly stagnated for several years and started to decline since 2015.
- Aggregate demand was consistently and rapidly growing until 2019 and started to decline thereafter. Consequently, the demand-pull inflation experienced before has been reversed to be the effect of contraction of both output and demand.
- Output was surplus until 2015, and prices were stable.
- Aggregate output and aggregate demand were at equilibrium in around 2015. The output deficit has been increasing since 2015, leading to two-digit inflation.

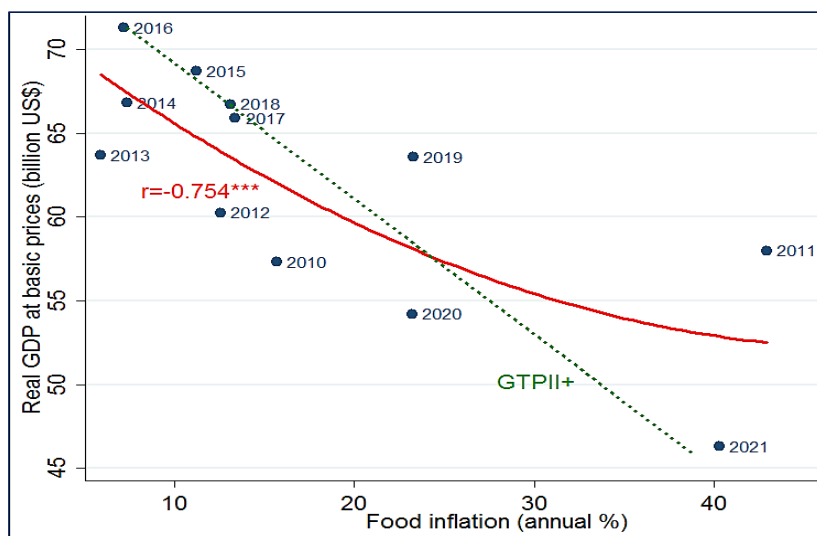
Figure 2.11: Increasing shortfall of output and inflationary trend since 2015



Source: Computed from data in the NBE (2001-2022)

As real output contracts, prices generally inflate. The dynamic link between real output and food price inflation verifies this macroeconomic instability. Food prices were inflating with contracting real output particularity since 2016 when inflation in Ethiopia was pronounced (Figure 2.12). Output and price fluctuations are the two major indicators of business cycles in Ethiopia. They were more observed with the political business cycles that prevailed over the two-decades period. Prices were rising (stable) because output was contracting (expanding) after (before) the general election. This dynamic link between output and inflation is particularly stronger in the GTPII+ period.

Figure 2.12: Output and price fluctuations with political business cycles in Ethiopia

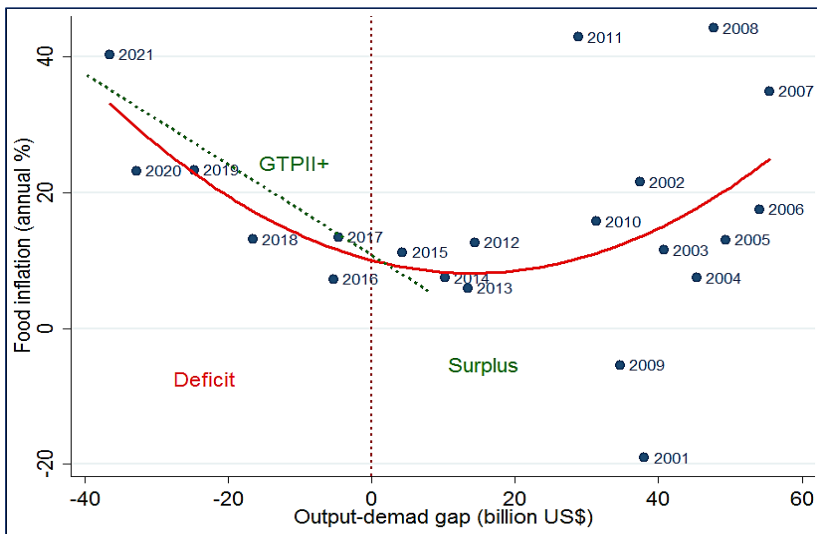


Source: Computed from data in the NBE (2001-2022)

The long run link between output-demand gap and food inflation is nonlinear depending on the level of output deficit determining food

inflation (see the red-colored nonlinear curve in Figure 2.13). Food inflation was rapidly rising with the increasing output-demand gap experienced during GTPII+ (after 2014). The US\$ 38.1 billion (81.2% of GDP) output surplus in 2011 has been consistently and rapidly contracting until it reaches a deficit of US\$ 36.5 billion (79.8% of GDP) in 2021/22, suggesting that the current food inflation in Ethiopia is strongly associated with the output shortfall. Output deficit in the supply-side that surpasses the fall in aggregate demand is driving the current high and persistent inflation in Ethiopia.

Figure 2.13: Food inflation rising with an increasing output deficit since 2016

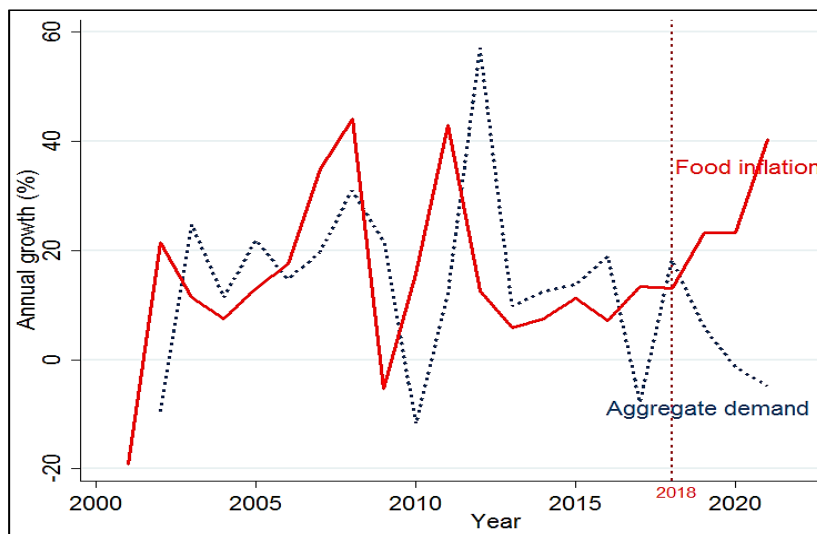


Source: Computed from data in the NBE (2001-2022)

The systematic link between growth of real aggregate demand and food price inflation shows their co-movement and the demand-pull inflation prevailed until 2015 (Figure 2.14). However, the rapid fall in the growth of aggregate demand after 2018 strongly verifies that the current food

inflation in Ethiopia is not demand-pull. Inflation is still high and persistent not because there is growth in aggregate demand arising from economic growth. Despite the rapid contraction of real aggregate demand since 2018, inflation in Ethiopia has been rising.

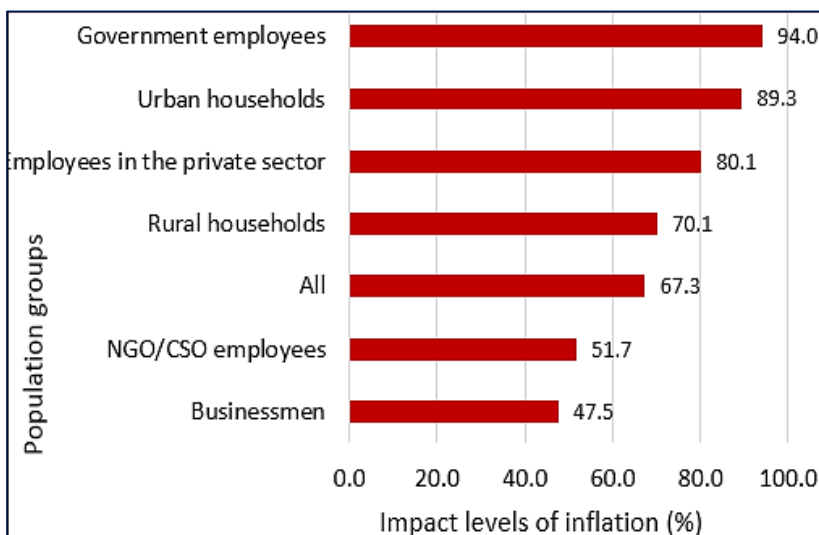
Figure 2.14: Inflation was not demand-pull after 2018



Source: Computed from data in the NBE (2001-2022)

The perceived adverse effects of inflation on different groups of households in Ethiopia was evaluated using the data collected from an expert survey of EEA 310 members around the world. They perceive that government employees, urban households, and employees in the private sector are the three household groups most adversely affected by inflation in Ethiopia (Figure 2.15).

Figure 2.15: Perceived adverse impacts of inflation on households



Source: Computed from expert EEA survey data (2024)

2.7. Productive Capacities

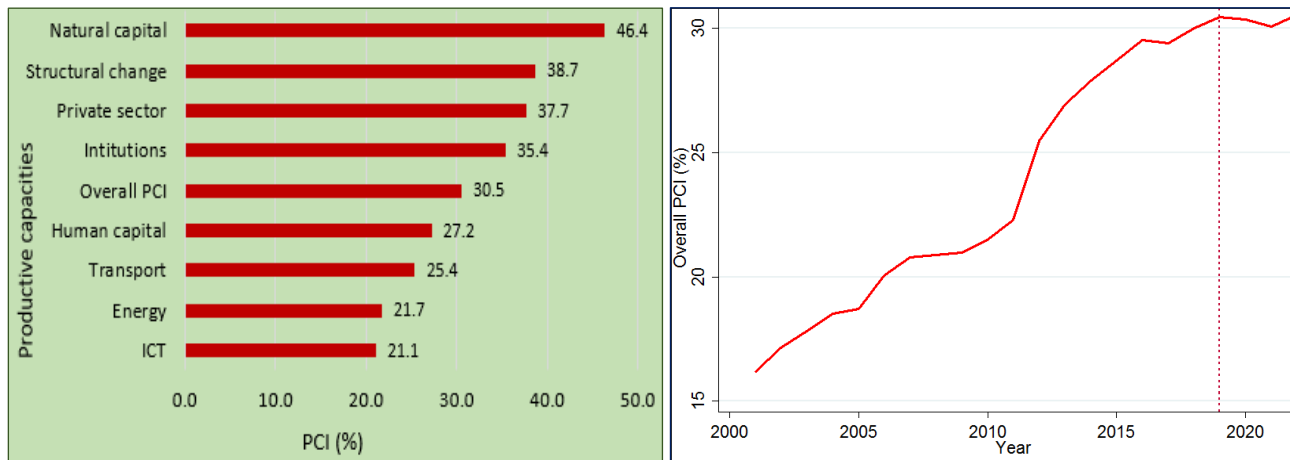
Productive resources are factors of production, financial and physical capital, infrastructure, and entrepreneurial capabilities (UNCTAD, 2024). Productive capacities and economic and social progress are closely intertwined. Countries with more merchandise exports are characterized by their weakest productive capacities. Productive capacities can enhance production and export of more complex products and help reduce vulnerability to negative external shocks. Productive capacities determine the capacity of an economy to produce goods and services and to address the associated demographic pressures for more production and supply.

In 2022, Ethiopia was ranked 169th (out of 194 countries and territories) with a PCI of 30.5 percent (left panel of Figure 2.16). The top three

productive capacities of Ethiopia were natural capital (45.4%), structural change (38.7%), and the private sector (37.7%). Energy and ICT were estimated to be the weakest productive capacities Ethiopia should further enhance. The capacity of the economy to produce goods and services is found to be very weak.

The overall productive capacity of Ethiopia to produce goods and services was increased from 16.2% in 2001 to 30.5% in 2022 (right panel of the figure). Despite the consistent and substantial improvement for several years, the overall productive capacity has been constrained since 2018. For various shocks and policy issues to be discussed later, Ethiopia's productive capacities have been seriously stagnated to produce goods and services.

Figure 2.16: Overall productive capacities index for Ethiopia in 2022



Source: Computed from data in UNCTAD (2001-2022)

To measure the relative importance of each productive capacity, the overall productive capacity was decomposed into eight components. The top three capacities with a more positive relative contribution to the overall capacities over the period are ICT (45.4%), human capital (31%), and structural change (17.7%) (Table 2.3). Natural capital and the private sector were contracting, leading to losses in the overall productive capacities.

Table 2.3: Relative contributions of productive capacities in Ethiopia (2021-2022)

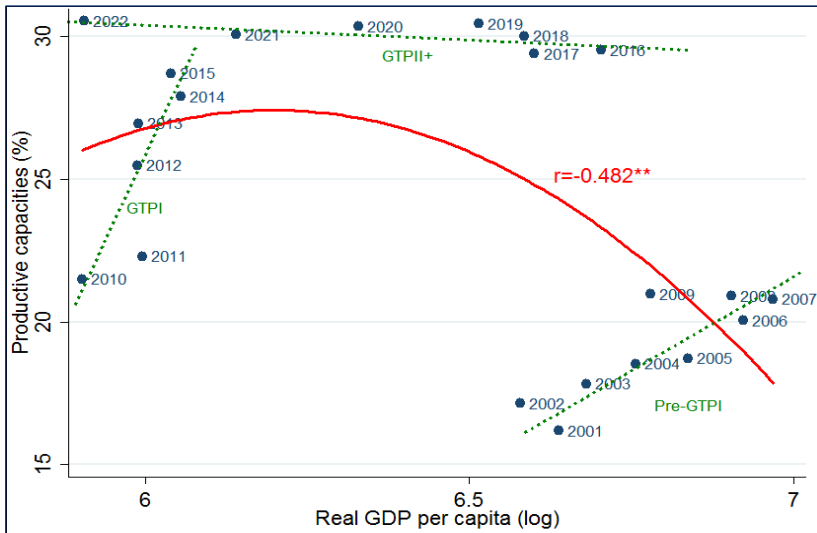
Productive capacities	Relative contribution to overall PCI (%)
ICT	45.4
Human capital	31.0
Structural change	17.7
Energy	10.6
Transport	9.8
Institutions	2.3
Private sector	-1.3
Natural capital	-15.3
Constant	0.0
Residuals	-0.2

Source: Computed from data in UNCTAD (2001-2022)

Productive capacities enhance economic growth and development. The dynamic link between real GDP per capita and productive capacities in Ethiopia reveals strictly different trends before and after 2016. The long-run association between GDP per capita and productive capacities was nonlinear with different implications across planning periods. Economic progress and human welfare (measured by GDP per capita) was enhanced by increasing productive capacities until 2015 (during pre-GTP and GTP1) (see broken lines in Figure 2.17). Economic progress was more responsive to productive capacities than in GTPI.

The period during GTPII+ (2016-2022) was characterized by stagnated productive capacities severely affecting economic welfare. Production and supply of goods and services, and hence GDP per capita, was rapidly falling due to the stagnation of productive capacities. Domestic conflicts and political instabilities and the associated policy and external shocks might have caused the recent deterioration of human welfare in Ethiopia.

Figure 2.17: Slowed economic growth with stagnated productive capacities since 2016

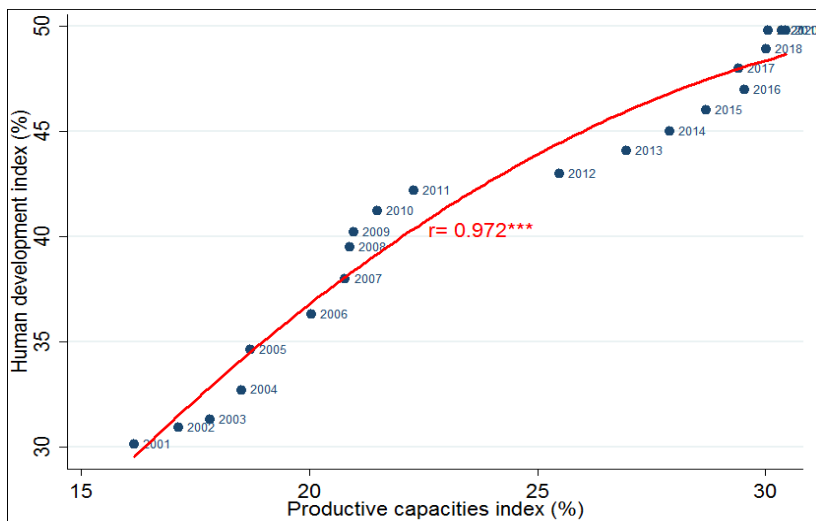


Source: Computed from data in the NBE and UNCTAD (2001-2022)

Human development and productive capacities in Ethiopia are also strongly associated (Figure 2.18). Human welfare and social progress measured by the HDI has been enhanced by the overall productive capacities of the nation. Fostering productive capacities enhances the capacity of the economy to produce more goods and services, thereby leading to more macroeconomic stability. The macroeconomic

instability caused by the shortfall in aggregate output and supply can be reduced through fostering productive capacities of the nation.

Figure 2.18: Social progress strongly enhanced with productive capacities



Source: Computed from the data in the UNDP and UNCTAD (2001-2022)

The presence and strength of production linkages among productive capacities was investigated by their contemporaneous growth linkages over the last two decades (Table 2.4). All productive capacities were significantly correlated, verifying that there was moderate to strong association between them.

- Natural capital and the private sector were inversely associated with other productive capacities, suggesting that natural capital and the role of the private sector in production of goods and services was constrained or deteriorating.
- There were strong production linkages between human and natural capital, transport, ICT, institutions, and structural change.

The production linkages between the private sector and other reproductive capacities were weak or moderate, confirming that the engagement of the private sector in production activities was constrained or limited.

Table 2.4: Productive capacity linkages in Ethiopia

	Human capital	Natural capital	Energy	Transport	ICT	Institutions	Private sector	Structural change
Human capital	1							
Natural capital	-0.93	1						
Energy	0.60	-0.83	1					
Transport	0.92	-0.84	0.48	1				
ICT	0.85	-0.98	0.88	0.73	1			
Institutions	0.82	-0.80	0.561	0.81	0.73	1		
Private sector	-0.69	0.68	-0.37	-0.70	-0.64	-0.48	1	
Structural change	0.86	-0.88	0.58	0.84	0.86	0.79	-0.68	1

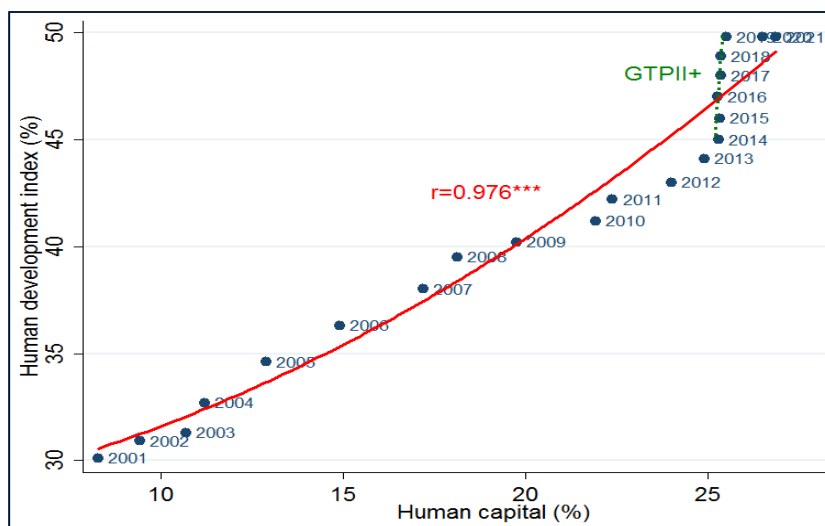
Note: All correlation coefficients are statistically significant.

Source: Computed from data in UNCTAD (2001-2022)

2.8. Human Capital

The long-run systematic link between human capital and human development was strongly positive with several implications across planning periods (Figure 2.19). Human capital stagnated in the GTPII+ period. For the period before GTPII+, human capital development was significantly improving with human capital. Human capital was an important capacity to enhance the production of goods and services in Ethiopia.

Figure 2.19: Social progress strongly enhanced with human capital before GTPII

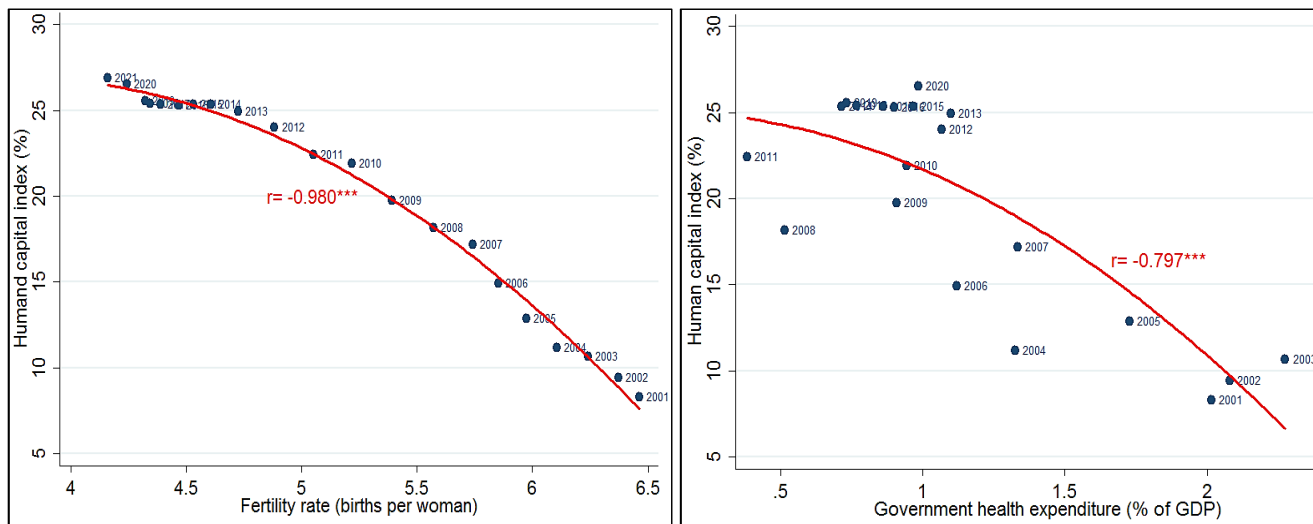


Source: Computed from data in the UNDP and the UNCTAD (2001-2022)

One of the positive developments in human capital in Ethiopia was attributable to the performance achieved in family planning and reproductive health (left panel of Figure 2.20). Human capital was consistently rising with reduced fertility rates. This may be particularly attributable to the national health extension service initiated and implemented in Ethiopia.

The other important factor affecting human development was health expenditure by the government of Ethiopia (right panel of the figure). Health expenditure by the government (as a % of GDP) has been decreasing over the last two decades. The decline in health expenditure has adversely and significantly affected human welfare and social progress in Ethiopia.

Figure 2.20: Human capital deteriorated with reduced government health expenditure

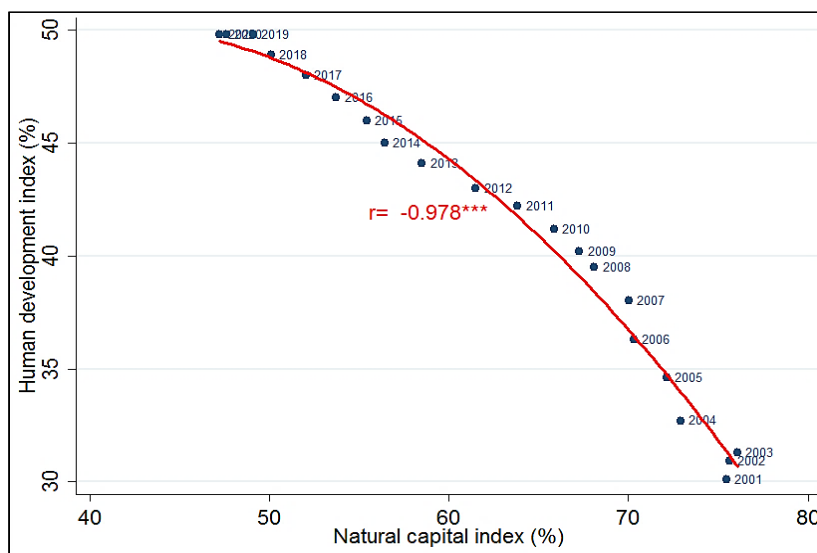


Source: Computed from data in the World Bank and UNCTAD (2001-2022)

2.9. Natural Capital

Human development in Ethiopia was enhanced with the expense of natural capital, including land, water, forests, minerals, and other natural resources. Over the last 22 years, natural capital has rapidly been eroded with progress in human development (Figure 2.21). Development achievements in Ethiopia have substantially destroyed natural resources.

Figure 2.21: Social progress deteriorated with contracting natural capital

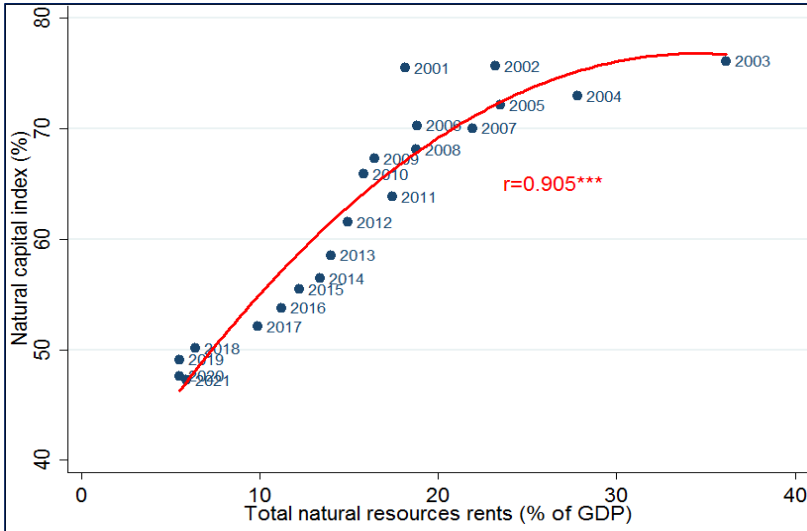


Source: Computed from the data in the UNDP and UNCTAD (2001-2022)

Natural capital and natural resource rents in Ethiopia have shown an increasingly deteriorating trend (Figure 2.22). The decline in natural capital was directly and strongly associated with reduced natural resource rents. Extraction of natural resources in Ethiopia is becoming increasingly cheaper (indicated in the figure following Figure 2.22),

leading to rapid erosion of natural resources, including land, forests, and minerals.

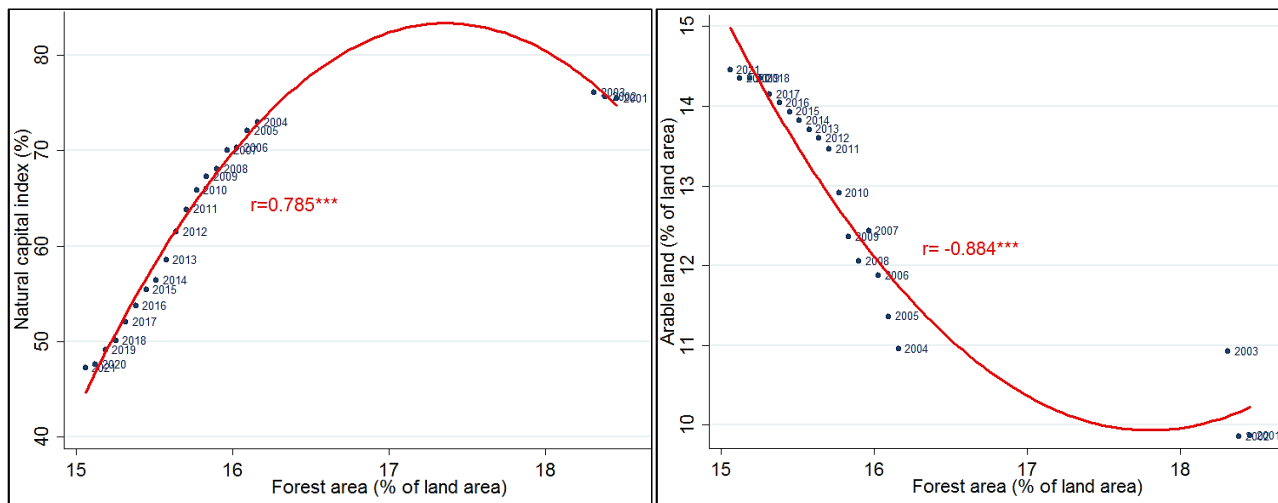
Figure 2.22: Natural capital rapidly eroded with reduced natural resource rents



Source: Computed from data in the World Bank and UNCTAD (2001-2022)

One of the most abundant natural resources or productive capacities in Ethiopia is arable land. However, arable land (as a % of total land area) has been strongly competing with forest area. Arable land has been expanding with cultivation of forest area (left panel of Figure 2.23). Consequently, natural capital has been eroded due to the contraction of forest area (right panel of the figure). Less responsible use of natural resources and very low and decreasing resource rents are the primary factors leading to the environmental crisis.

Figure 2.23: Natural capital and forest area rapidly eroded

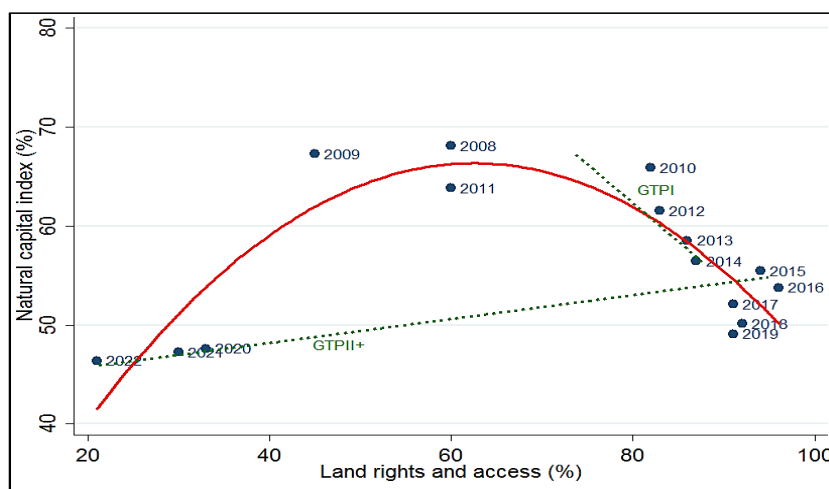


Source: Computed from data in UNCTAD and the World Bank (2001-2022)

Land rights and access in Ethiopia varies over time depending on regimes and planning periods (Figure 2.24). Despite the public ownership of land proclaimed nationwide, access and rights to land have been substantially manipulated to create significantly differentiated rights and access. During the GTPI period, land rights and access was increasing with deteriorating natural capital that might be related to land allocation for investment across regional states, including Benishangul-Gumuz and Gambella.

In GTPII+, however, both natural capital and land rights and access were declining. Land rights and access measured by the effectiveness of land tenure system and land markets, the equitable management of communal lands, and gender equality to access land was particularly deteriorating since 2016.

Figure 2.24: Natural capital contracting with deteriorating land rights and access during GTPII+



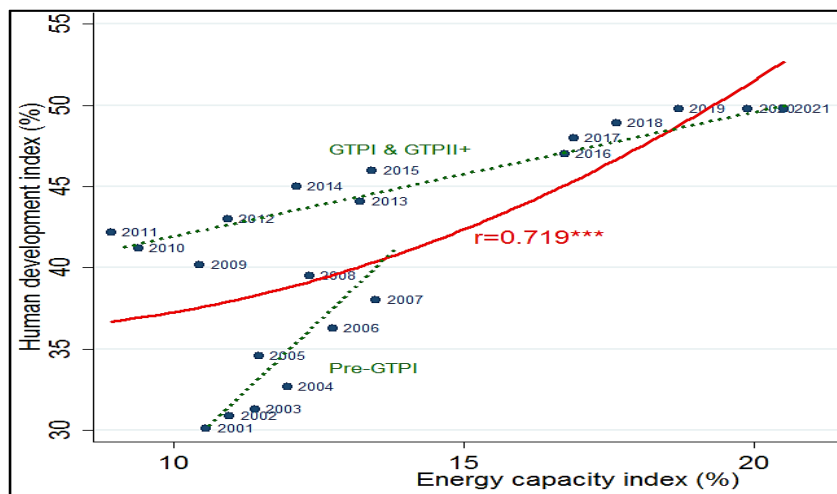
Source: Computed from data in MCC and UNCTAD (2008-2024)

2.10. Energy and Transport

The dynamic link between energy capacity and development in Ethiopia is significantly differentiated across planning periods (Figure 2.25):

- The long-term systematic link between energy and social progress was generally positive.
- Before the GTP period, social progress was more strongly responsive to energy capacities.
- During the GTP and later years, social progress was moderately enhanced with energy capacities.
- Despite the construction of new hydro power sources in the GTPII+, social progress was not enhanced as expected. Limited infrastructure for distribution energy and export of energy to neighboring countries as source of foreign earnings might have led to limited contribution of energy to social progress.

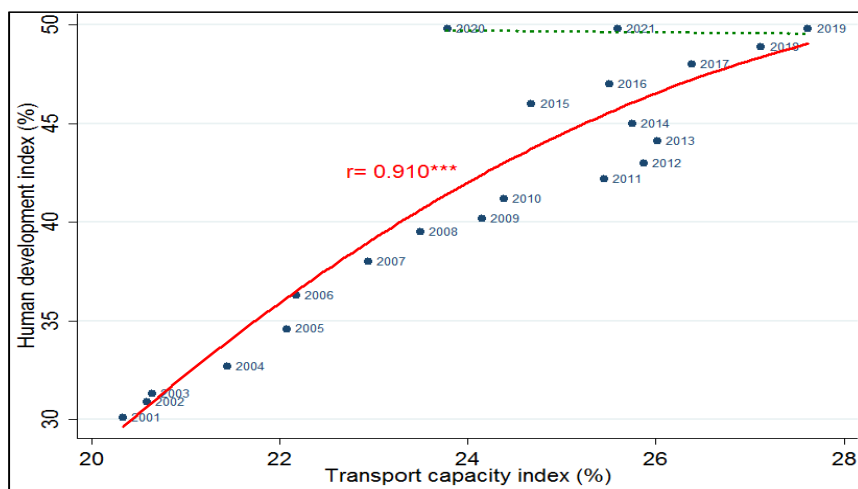
Figure 2.25: Social progress enhanced with energy capacity



Source: Computed from data in UNDP and UNCTAD (2001-2022)

The systematic link between social progress and transport capacities has at least two implications (Figure 2.26). In the long-run, social progress is improving with transport capacities. On the other hand, human development has stagnated with contracting transport capacities in recent years, which might be attributable to the domestic conflicts and political instabilities widely prevailed in Ethiopia (see the broken line connecting the years).

Figure 2.26: Social progress strongly associated with transport capacity until 2018



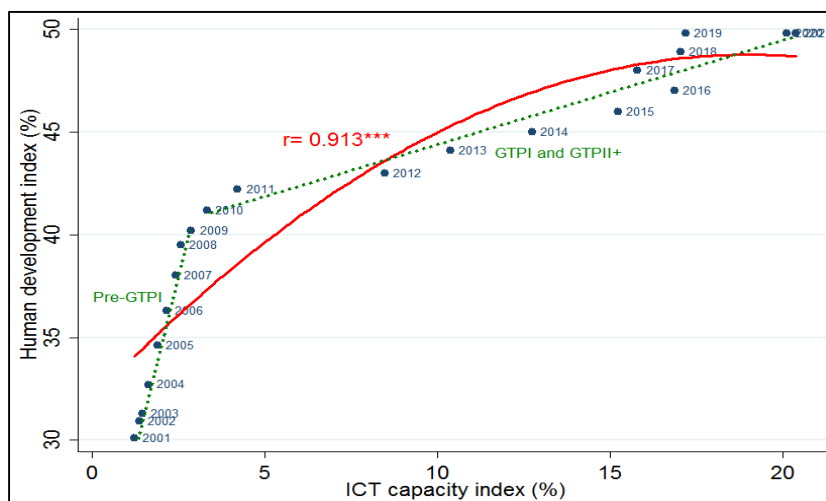
Source: Computed from data in UNDP and UNCTAD (2001-2022)

2.11. ICT, Institutions, and the Private Sector

Information Communication Technology (ITC) enhances the capacity of nations to produce more goods and services. The systematic link between ICT and social progress in Ethiopia is generally positive with different implications across planning periods (Figure 2.27). ICT capacity was very low with little positive effect on human development before the GTP.

During the GTP period, human development was more strongly enhanced with ICT capacity. The start of social media in 2010, digital public investment, and other ICT capacities have particularly helped improve access to information communications in Ethiopia, resulting in improvement in social progress.

Figure 2.27: Social progress strongly enhanced with ICT capacity



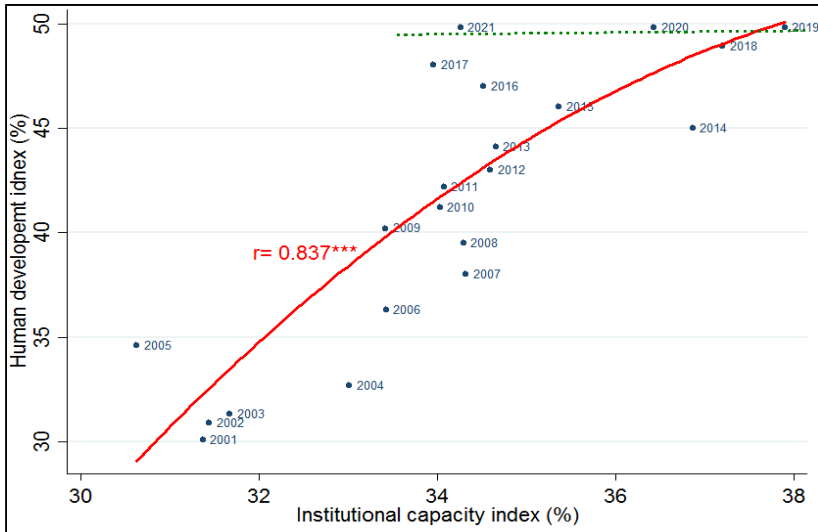
Source: Computed from data in the UNDP and UNCTAD (2001-2022)

Institutions, the rules and values that shape the basic structure of society, are expected to reduce the transaction costs of economic activities. Long-term development requires good institutions that encourage cooperation, protection of property rights, rule of law, and wealth creation. Institutional capacity helps boost production of goods and services in an economy.

In Ethiopia, institutional capacity was the source of social progress during and before the GTP period (Figure 2.28). However, institutional capacities have been rapidly deteriorating since 2019 with negligible contribution to social progress. The prevailing domestic conflicts and

political violence in Ethiopia are expected to have adversely affected institutional capacities and their contribution to overall development.

Figure 2.28: Social progress stagnated with contracting institutional capacity since 2018



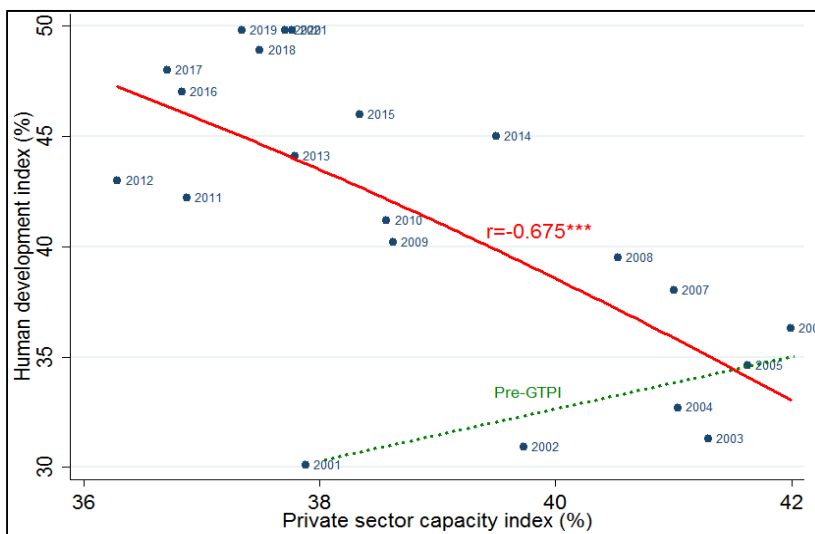
Source: Computed from data in UNDP and UNCTAD (2001-2021)

Active engagement of the private sector in economic activities drives development. It provides goods and services that benefit the public, creates employment opportunities, generates tax revenues to finance development infrastructure, and innovates to tackle development challenges.

The longrun dynamic link between development and the private sector in Ethiopia is negative. Social progress was consistently falling with rising private sector capacities (Figure 2.29). The role of the private sector in development was limited and constrained. The role of the private sector was positive until the 2005 national election when active engagement of the opposition parties had strongly challenged the

competence, integrity, and policy of the ruling party. The government has constrained the engagement of the private sector in multiple dimensions after the election. Consequently, the role of the private sector in recent years is very limited and inconsistent.

Figure 2.29: Social progress improving with the expense of the private sector



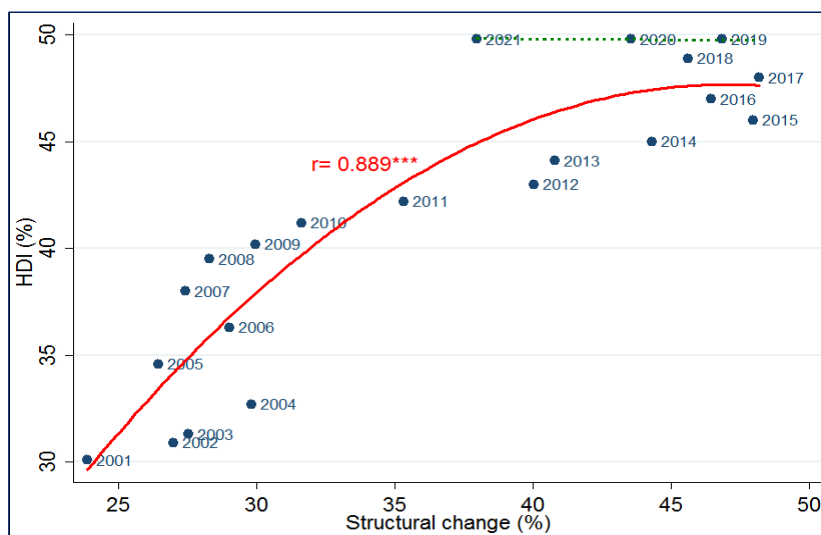
Source: Computed from data in UNDP and UNCTAD (2001-2022)

2.12. Structural Change

Structural change may be defined as a dramatic shift in the functioning of industries or markets of an economy mainly brought about by major economic developments. It is mainly driven by new technologies, shifts in the use of capital and labor, new economic developments, changes in resource endowment, shift in the supply of and the demand for resources, and changing political landscape. The focus of models of structural change is on how economies are transformed from primary sectors like agriculture to other modern sectors of the economy.

Social progress in Ethiopia was substantially enhanced with structural change until 2019 (Figure 2.30). HDI increased from 30.1% in 2001 to 49.8% in 2021 with the rising structural change within the period (23.9% to 38.7%). However, this positive association was constrained in the GTPII+ period. After 2019 structural change has been stagnated to enhance social development. As stated before, this stagnation is associated with the domestic conflicts and political instabilities prevailed in the period.

Figure 2.30: Social progress stagnated with deteriorating change since 2019



Source: Computed from data in UNDP and UNCTAD (2001-2022)

2.13. Concluding Remarks

For several years, the Ethiopian economy was known as one of the fast-growing economies around the world. However, the output performance of the economy significantly differs across planning

periods. Real GDP and GDP per capita were rapidly falling during the GTPII+ (since 2016). Consequently, prices in Ethiopia were consistently rising and eroding the welfare of citizens. The macroeconomic instability in Ethiopia is mainly caused by political business cycles imposed by incumbent regimes using expansionary and contractionary policies, respectively, just before and after election periods. Political business cycles are aimed at realizing medium-term political objectives but counterproductive to long-term development goals and objectives.

While aggregate output and demand seemed balanced around 2015, signs of a potential imbalance emerged soon after. Since 2019, aggregate demand has been steadily contracting. This growing gap between output and demand has fueled inflation, putting a strain on Ethiopian households. Further compounding the issue, gross domestic fixed investment and government spending have also declined since 2016.

Over the last two decades, the Ethiopian economy had considerable production linkages between agriculture and the other two sectors. The GDP share of agriculture value added reduced over the years. The service sector has taken the lead and dominated the economy since 2014. However, the production linkages among sectors of the economy remained stagnated during the GTPII+ period. Accordingly, both agricultural and industrial value added (% of GDP) have been contracting since 2016.

The overall capacity of Ethiopia to produce goods and services was consistently increasing until it stagnated in 2019. Social progress was strongly enhanced by the productive capacities to produce more goods and services. However, there are limited linkages between productive capacities. Natural capital and the private sector were not aligned to

enhance the overall productive capacity of the nation to produce and boost aggregate output and supply.

Despite the positive contribution of energy, transport, ICT, and structural change, economic and social development was enhanced with the expense of natural capital arising from decreasing natural resource rents, deforestation, and deteriorating rights and access to land. Moreover, the role of the private sector to produce goods and services was substantially stagnated due to the limited engagement in economic activities.

Production and supply of outputs has been contracting, calling the urgent need for addressing structural constraints stagnating production and supply across sectors. Aggregate output in all sectors (agriculture, industry and services) was associated with productive capacities that were strongly stagnated by factors such as domestic conflicts and political instability.

The macroeconomic imbalance is one of the major causes and drivers of inflation in Ethiopia. The shortfall in aggregate output that was widening over the years should be reversed by maintaining the fast economic growth experienced before 2016. It is commendable to align productive capacities and ensure production linkages and enhance production of goods and services that help stabilize the current macroeconomic instability. The high and persistent inflation requires prudent economic policy and management that results in overall economic stability.

References

- Araar, A. and J. Y. Duclos. (2008). An algorithm for computing the Shapley Value, Mimeo, PEP and CIRPEE, Universite Laval.
- MCC (Millenium Challenge Corporation). (2024). Data, available at <https://data.mcc.gov/>
- NBE (National Bank of Ethiopia). (2022). Annual Bulletin 2021/22, Addis Ababa, Ethiopia.
- UNCTAD (United Nations Trade and Development). (2024). Productive Capacities Index, available at <https://unctad.org/statistics>
- UNDP (United Nations Development Program). (2021). Human Development Reports, <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>
- World Bank. (2024). World Development Indicators. Available at <https://databank.worldbank.org/source/world-development-indicators>

3. AGRICULTURAL PRODUCTION AND FOOD SUPPLY

3.1. Introduction

In the national GDP of Ethiopia, agriculture is the long-standing and main actor, which contributed more than 50% of the GDP for fiscal years before 2007. However, the contribution continuously reduced, and currently reached 32% in 2022 (NBE, 2022). Since it is the main source of consumable food, employment, foreign exchange and industrial inputs that the sector has a strong and significant contribution in the overall economic performance of the country. Though it is still a prominent actor, contribution of the sector in the foreign earnings and employment creation has subsequently reduced. In 2021/22 real GDP of Ethiopia grew by 6.4% that was slightly higher than the growth rate (6.3%) a year before. In the fiscal year, the agricultural sector of the country grew by 6.1% and accounted for about 32% of the GDP share.

During GTP II implementation period (2015 to 2020), agriculture of the country had an annual average growth rate of 4.1%, which was lower than the growth rate (6.6%) during the time of GTP I (2010/11-2014/15). Frequent climate and environmental shocks with a significant deterrent effect on agriculture may be one reason for the reduction. Moreover, the strong attention given to the mega projects, and the industrial and service sectors may be the other reason for the continuous reduction in the agricultural sector's growth rate. Ethiopian agriculture had a remarkable annual average growth rate of 7% in between 1999-2008/09 (Dorosh *et al.*, 2012), which was the time of renaissance not only for the agriculture but also for the other sectors. In recent times, sectoral contribution of agriculture to GDP growth showed a gradual reduction. For instance, the sector had an average of 2.8% sectoral contribution to the GDP growth between 2010/11 and 2014/15, but the rate significantly reduced to 1.5% in between 2015/16-2019/20, while

the overall GDP growth rate was 8.2% on average (Ministry of Finance, 2021 and NBE, 2022).

Agriculture is one of key economic sector got attention of the Ethiopian Government in the preparation of the ten-year economic development plan (2021-2030) and in the homegrown economic reform strategy. In the plan period, the GDP share of the sector is projected to decline to 22% registering a 10.6% reduction. Moreover, the share of the sector in the export earnings will reduce from 77% in 2020 to 36.4% at the end of the plan period. Moreover, the percentage of the labor force that participates in agriculture will decline from the current level (72.7%) to 42% in 2029/30 due to a shift towards the industrial and service sectors. In the plan period, agriculture is projected to contribute 1.6 percentage points to the overall GDP growth while industry and service sectors are projected to contribute 4 and 4.4 percentage points, respectively, since the aggregate economic growth plan is 10% per annum (Planning and Development Commission).

The federal government has identified key priority intervention areas to increase productivity of smallholder farms and expand large-scale commercial farms that subsequently transform the sector, ensure food and nutrition security as well as achieve successful import substitution. In the ten-year development plan, the government provides due attention on how to raise the incomes and livelihoods of smallholder farming communities to end poverty through boosting agricultural productivity. Development of the sector could play a significant role in the structural transformation of the economy and ensure food and nutritional needs of the nation. Moreover, agricultural improvement could enhance the raw material supply to the industrial sector, which could sustain supply of exportable outputs. Hence, this chapter of the book tried to update the performance of Ethiopian agriculture, especially the crop and livestock production, productivity, input use and related sectoral activities. Moreover, it identified the main constraints that deter down the performance of Ethiopian agriculture.

The report mainly relays on quantitative secondary data compiled from Ethiopian Statistical Service (ESS), National Bank of Ethiopia (NBE) and Food and Agriculture Organization (FAOSTAT), World Bank Group and other relevant sources. The quantitative data in the report was analyzed using non-parametric methods, which comprised of narrations, tabulations, figures, and simple mathematical ratios.

3.2. Agricultural Production

3.2.1. Agriculture value added

Share of agriculture in the total aggregate output of the country has been considerably declining over time especially after 2005 and currently it is about one-third of the national GDP (Figure 3.1). The national level GDP share of the sector in the country subsequently reduced especially in the previous two decades and reached 32.4% in 2022. Share of the service sector in the national GDP grew faster and resulted in a service-dominated economic system. As to Figure 3.1, GDP share of agriculture significantly reduced between 2010 and 2020 compared to the reduction in between 2000 and 2010.

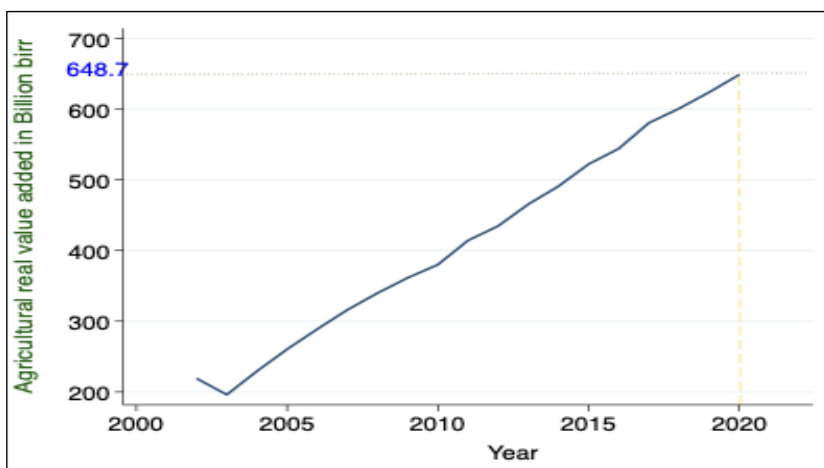
Figure 3.1: GDP share of agriculture and allied activities



Source: Computed from data in the National Bank of Ethiopia (2011-2022) accessed in 2022

Figure 3.2. shows that agricultural value added of the country had a general increment except for some variability in a few of the fiscal years. Though the GDP share of the sector reduced subsequently (See Figure 2.1.), sectoral value added within the country had a continuous increment especially after 2003 on which linear increment started. Before 2003 the value added by the sector increased though it did not consistently increase. The maximum value added of the sector was seen in 2020, which was 648.71 billion ETB based on a World Bank group report.

Figure 3.2: Agricultural real value added of (billion ETB)

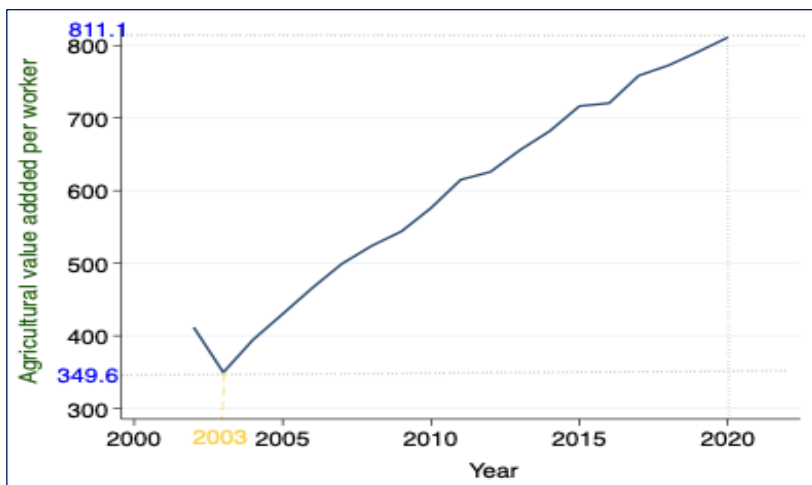


Source: Computed from data in the World Bank Group (2001-2020) accessed in 2022

Figure 3.3 shows that the agricultural value added per worker had a similar trend to the overall agricultural value added of the country. The figure shows that the agricultural per worker value added to the country is an exact replica of the overall value added to the sector, implies that sectoral value added and the population of the country had linear and consistent growth across time. As to the figure, the agricultural value

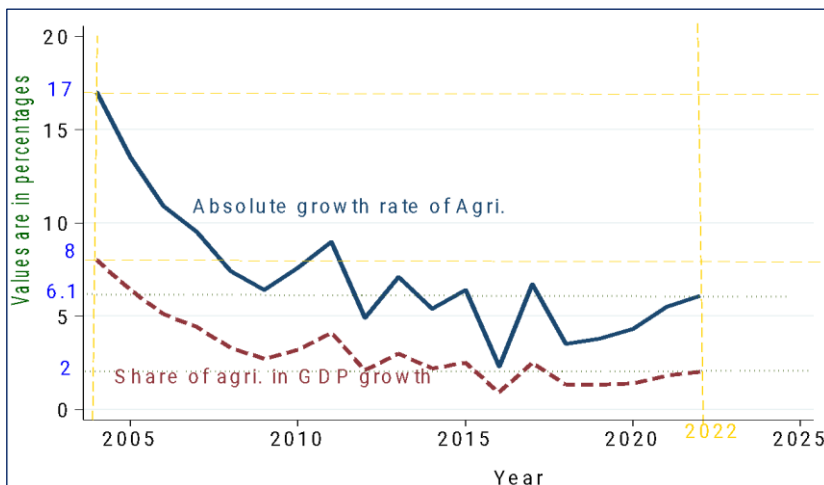
added of the labor employed in the sector in USD at a constant price of 2015 had a continuous increment with a small variability in few of the fiscal years such as 2008, 2012, and 2016.

Figure 3.3: Agriculture value added per worker (at 2015 constant US%)



Source: Computed from FAOSTAT (2001-2020) accessed in 2022

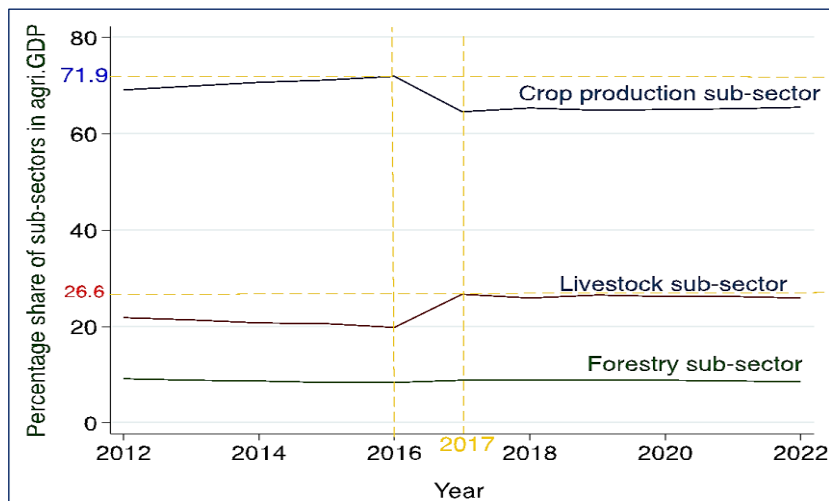
The percentage share of agriculture in the overall GDP growth of the country was continuously decreasing in the previous two decades except for the previous three years insignificant increment. Figure 3.4. shows that the absolute growth rate of the sector and its percentage share in the overall GDP growth had a similar trend in the previous two decades, having a continuous reduction with the going of time. Ups and downs in the absolute growth of the sector had a direct implication on the sectoral share of the GDP growth of the country. The figure reveals that better performance in absolute growth had a direct implication on the share of the sector in the overall GDP growth rate. Absolute growth of the sector had strong variability compared to the growth contribution to the GDP growth.

Figure 3.4: Absolute growth rate and GDP share of agriculture growth

Source: Computed from data in the NBE (2001-2022) accessed in 2022

Agricultural value added to the country is less diversified since a prominent proportion (more than 60%) is sourced from the crop sub-sector. The two sub-sectors (crop and livestock production) play a significant role in the overall agricultural value added of Ethiopia; however, the former has the dominant share. Though the contributions are insignificant, fishery and forestry are also part of the sector. More than two-thirds of the agricultural value added of the country is sourced from the crop production sub-sector, which accounts for nearly 80% of the land under cultivation and employs 60% of the rural workforce (NBE, 2022. Figure 3.5 reveals that the overall share of crop production between 2016/17 and 2020/21 the from agriculture of the country remains constant. The figure reveals that in the previous ten years (from 2011/12 and 2021/22) crop production of the country had more than 67% contribution to agriculture. Contribution of animal farming and hunting has increased in recent fiscal years, while forestry has a relatively consistent share in the agriculture of the country.

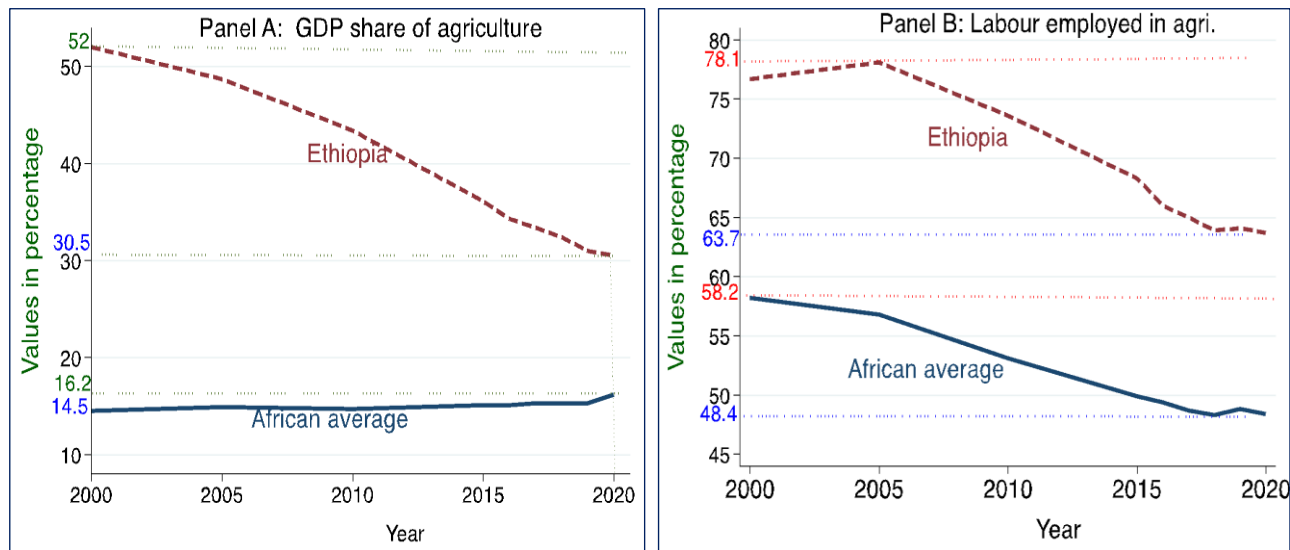
Figure 3.5: GDP share of sub-sectors of agriculture



Source: Computed from data in the NBE (2012-2022) accessed in 2022

Figure 3.6. shows that the agricultural value added of Ethiopia in the total GDP is by-far higher than the other African countries, which indicates that the Ethiopian economy is highly dependent on the sector. Though the GDP share of Ethiopian agriculture was higher, and in most case more than double of African countries, the trend continuously reduced. Unlike Ethiopian agriculture, the GDP share of the other African countries' agriculture showed some increment between 2000 and 2020. In the previous two decades (between 2000 and 2020) GDP share of agriculture in Ethiopia reduced by 41.4%, while in other African countries the share increased by 11.7% (FAO, 2021). The second panel of Figure 2.6. tries to compare employment of agriculture in Africa and Ethiopia, where a significant proportion of Ethiopian labour is engaged in the sector. Employment share of agriculture had a similar trend and rate of reduction in both Ethiopia and African countries at large.

Figure 3.6: GDP share and labor force employment in agriculture in Africa and Ethiopia

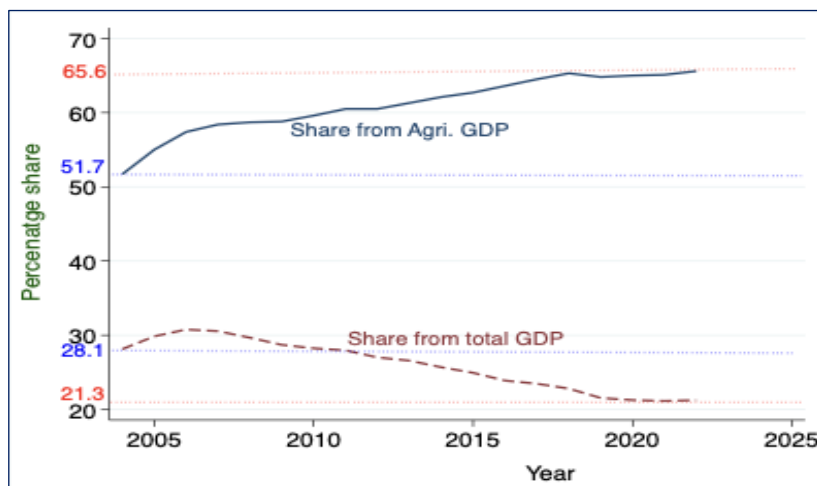


Source: Computed from data in FAOSTAT (2000-2020) accessed in 2022

3.2.2. Crop production

Crop production sub-sector contributes the lion's share in the agricultural and overall GDP of the country. Figure 3.7 shows that in the previous ten years share of crop production from the agricultural GDP was more than 60%, while it was about 50% in 2004. The recurrent increment in agricultural GDP share of the sub-sector indicates that the share of the other sub-sectors such as livestock, fishery and forestry has subsequently reduced. The crop production sub-sector's declining share of GDP from 2006 to 2022 indicates that it is the primary driver of the overall reduction in agriculture's contribution to the economy.

Figure 3.7: GDP and agriculture share of the crop sub-sector

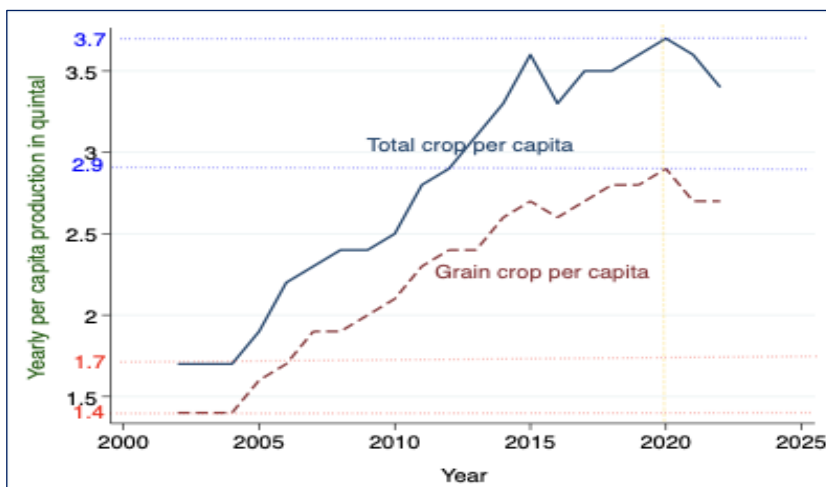


Source: Computed from data in the NBE, 2022

Reports of Ethiopia Statistical Service (ESS) show that total crop production of the country had a continuous increment in the previous two decades, however, the increment was not consistent in recent times. Every movement in the total crop production of the country is strongly

subjected to the ups and downs in the grain crop production, which implies that grain crop production of the country takes the lion's share in the overall crop production. The country produced a maximum of 425.9 million quintal crops in 2020, wherein 78.70% of the production was from grain crops, which had a maximum production of 335.2 million quintals in the fiscal. Figure 2.8 reveals that the country had the maximum total crop per capita production (3.7 quintal per year) in 2020, which was prominently sourced from better productivity of grain crops. In the previous two decades per capita crop production of the country had significant improvement (118%), which resulted in 5.6% yearly increment. However, the growth was not consistent with the reduction in a few of the fiscal years, especially in recent ones (Figure 3.8). Compared to the growth rate of the total crop production, grain crop production of the country had relatively lower achievement that was 5.10% per year in the previous two decades. In the previous two to three fiscal years, total crop production of the country had reduced, which is mainly because of the reduction in the grain crops.

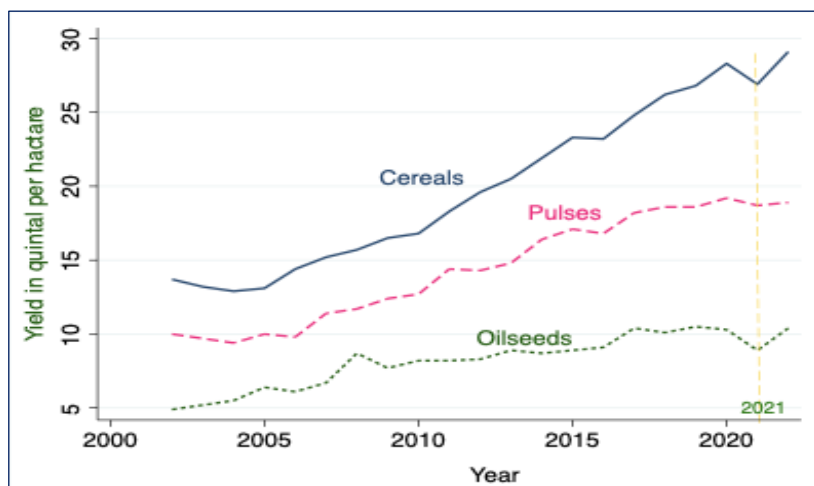
Figure 3.8: Total crop and grain crop per capita production (quintals)



Source: Computed from data in Ethiopian Statistical Service (ESS), 2024

In recent times, both cereal and pulse crops production of the country have relatively lower growth rate implies that the domestic supply did not show sustainable increment. Grain crop production of the country mainly comprises cereals, oilseeds and pulses, wherein the former one has the right-hand share in overall production. Though production of both pulses and cereals is increasing in recent times, the former one had very low compared to performance of the latter as per the report of Ethiopian Statistical Service. Production trends of the two crops were inconsistent in the different fiscal years. The figure also shows that pulses and oilseed crop yield of the country is reducing in recent fiscal years (Figure 3.9). The figure reveals that in the previous two decades yields of the major grain crops of the country had an increasing trend with some variability in a few of the fiscal years. This implies that the increment was inconsistent especially in recent years, wherein yield of cereals and oilseeds had strong reduction in 2021. Gebissa and Manuel (2021) identified that shortage of farmland, climate change, fragmentation and degradation of farmland, unevenly distributed constructions and urbanizations, pests, lack of integration among stakeholders, political instabilities, and its prospects are the common challenges in the recent agriculture. In line with this, the drought, erratic rainfall and frost variables are also affecting agricultural outputs. It reduces crop yield, nutrition, groundwater, soil organic matter, soil quality, soil health, and incomes (Melese, 2019; Tufa, 2019). Dorosh and Minten (2020) identified that the agricultural sector of Ethiopia faces daunting challenges, including increasingly binding land and water constraints in large parts of the country, possible limits to economically achievable crop yields.

Figure 3.9: Yield of cereals, pulses, and oilseeds yield (qt/ha)



Source: Computed from data in ESS accessed in 2022

Figure 3.10 reveals that significant growth variability and reduction was observed in oil and pulse crops production per capita of the country. Degye *et al.* (2023) had similar findings regarding production per capita of those crops in the country. Pulse and oil crop production per capita of the country had a persistent and continuous reduction in the last five years, however, the reduction rate was quite different. In the last five years (2017 to 2022) oil crop production had significant reduction, which may be one critical reason for the skyrocketing food price rise in Ethiopia as of supply shortage. The country had a maximum cereal crop production per capita (2.58 quintals) in 2020; however, the productivity was not consistently increasing; rather it showed a recent reduction.

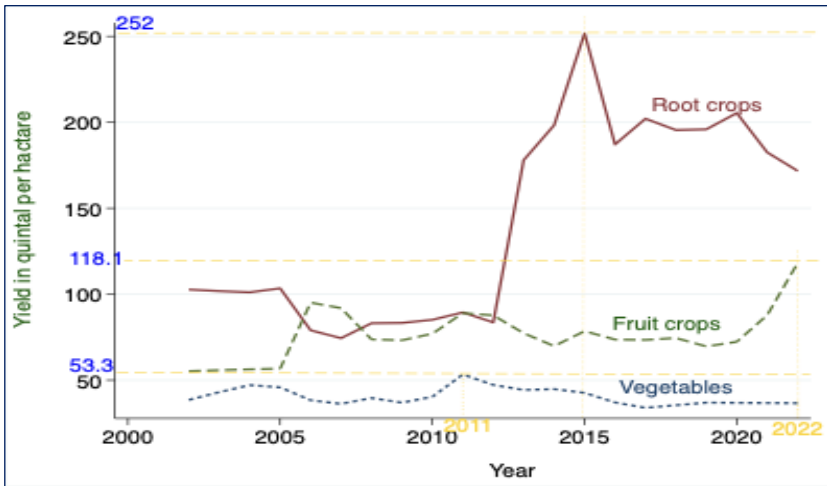
Figure 3.10: Cereal, pulse and oilseed per capita production



Source: Computed from ESS production data base accessed in 2022

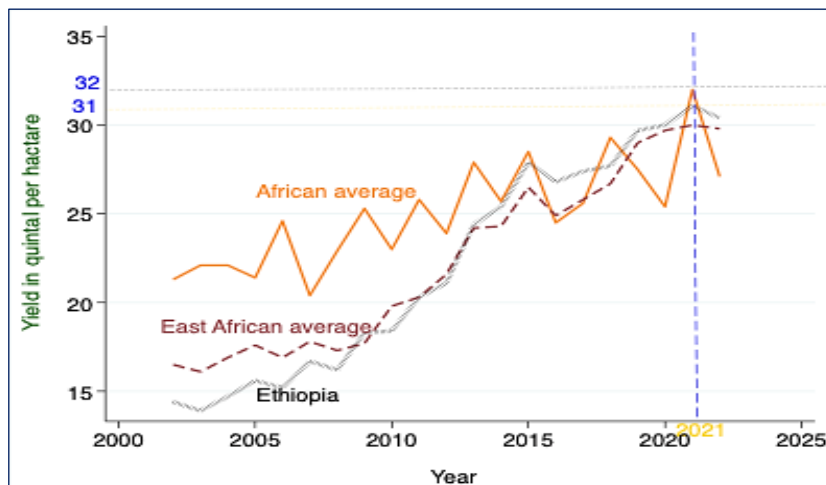
Regardless of policy attention to raise production and productivity of high-value horticulture crops, fruit and vegetable crop yield of the country showed a persistent and continuous reduction in the previous five years (2016-2020). Production volume of vegetables and root crops in the country showed some reduction in recent fiscal years according to the report of EES (2021/22). However, in some of the fiscal years, fruit crop production volume showed increment, which was mainly because of increasing cropland extensively that could not guarantee yield improvement. Annual report of Ethiopian Statistical Service (ESS) confirmed that cropland coverage of root crops increased from 199,899.80 ha to 216,971.05 ha, showing 8.54% increment, in between 2012 and 2015. Similarly, cropland coverage of fruit crops increased from 115,533.76 ha. to 150,959.93 ha, which showed 30.66% increment in between 2019/20 and 2021/22 that was one reason for the significant root crops production volume increase in the previous decade. Yields of vegetables and root crops showed continuous reduction in the previous few years especially after 2016. Production and yield of vegetables had some linear and continuous reduction, while root crops had drastic type, which may be because of lower attention from the government and other concerned stakeholders since their focus shifted towards boosting production of cereals, especially wheat and rice to secure self-sufficiency. Figure 3.11 shows that the country had 53.3 quintal per hectare yield of vegetables in 2011, and it reduced to 36.6 quintal per hectare after a decade in 2022. In the same fashion, yield of root crops reduced from 252 quintal per hectare to 172 quintals between 2015 and 2022 as of the successive reduction in volume of production. The potential challenges mentioned under the cereal and pulses could be also crucial constraints in the vegetables, fruits, and root crops production of the country.

Figure 3.11: Trends of vegetable, fruits, and root crops yield in Ethiopia



Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

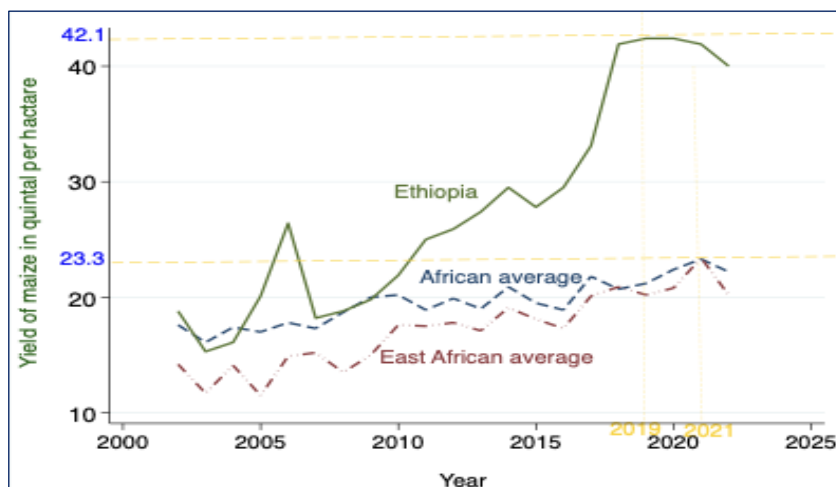
Figure 3.12 shows that the overall trend of wheat yield in Ethiopia and East African countries had a continuous improvement with small and frequent ups and downs. Based on the figure, Africa level wheat yield was better between 2002 and 2016, however, it had strong variability compared to the trend in Ethiopia and East Africa. Wheat yield in East African countries and Ethiopia was highly related, which may be because of the larger share of Ethiopia in the regional wheat production. Every movement, ups and downs, in wheat yield of East African countries is highly related to the yield what Ethiopia had in the previous two decades. In some of the fiscal years, especially after 2013, wheat yield in East African countries was better compared to Ethiopia.

Figure 3.12: Trends of wheat yield in Africa and Ethiopia (qt/ha)

Source: Computed from data in FAOSTAT (2001 -2022) accessed in 2022

Figure 3.13 reveals that yield of maize in African, East African and Ethiopia showed some improvement with the going of time. In the process, Ethiopia had better achievement registering significant improvement in maize yield in the previous decade (2012 and 2022). In the previous two decades Ethiopia had more than double maize yield increment, East African and other African countries had smaller improvement. In the previous few years (since 2019), yield of maize in Ethiopia was reducing, however, it is by-far higher than the average amount produced by African and east African countries. This may account for continuous innovation in the generation dissemination of high yielding maize varieties together with improved agricultural practices.

Figure 3.13: Trends of maize yield in Africa, East Africa and Ethiopia



Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

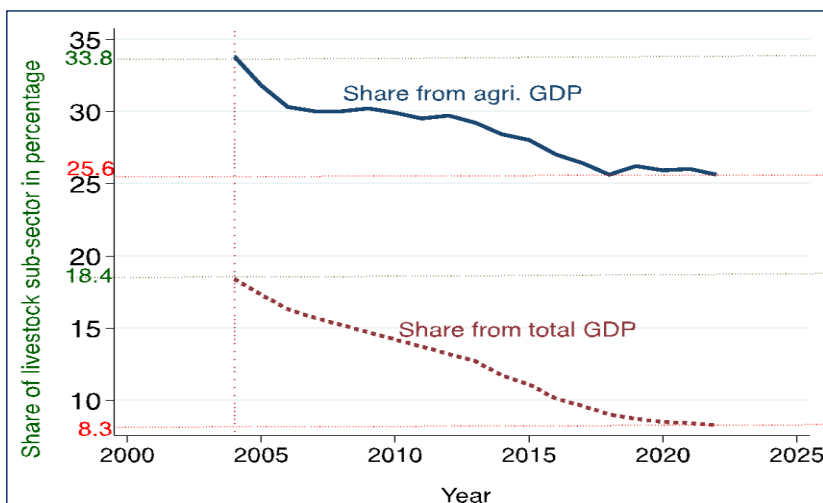
3.2.3. Livestock production

Livestock sub-sector of Ethiopia contributes not only to the agricultural GDP and the overall GDP, but also plays a significant role in the foreign exchange earnings of the country accounting for 16-19% (Statista, 2022). Additionally, the sub-sector provides employment to over 30% of the agricultural labor force of the country. Livestock also provides high value food in the form of meat, milk, eggs, and honey, and owning livestock could improve the potential caloric nutrition by 20% at the household level. The country produces over 3.8 billion liters of milk valued at USD 5.1 billion, one million tons of beef valued at USD 2.5 billion, and 116 million eggs (CSA, 2019). Beyond food production and supply, the livestock sector also plays a crucial role in the agriculture of the country, especially the crop production. It is a source of draught power for traditional input-based crop production of the country. Livestock of the country accounts for more than 26% of the value of

annual crop production. The livestock sector also supplies inputs for agro-processing industries and provides manure for crop cultivation and cooking fuel for home consumption. Consequently, 14 million households, or 70% of the population within the country keep livestock for various purposes (CSA, 2019).

In the previous two decades (2002 to 2022) both agricultural and total GDP share of the livestock sub-sector had a subsequent reduction. Figure 3.14 reveals the share of the livestock sub-sector in the overall GDP and agriculture of the country in which its share has a continuous reduction because of a shift towards the crop sub-sector. Total GDP share of the livestock sub-sector in the country reached 8.3% in 2022 from 18.4% in 2002, which had a 54.9% reduction in the previous twenty years. However, the rate of reduction in the agricultural GDP share of the livestock sub-sector was relatively lower, which was 24.3% in the previous two decades.

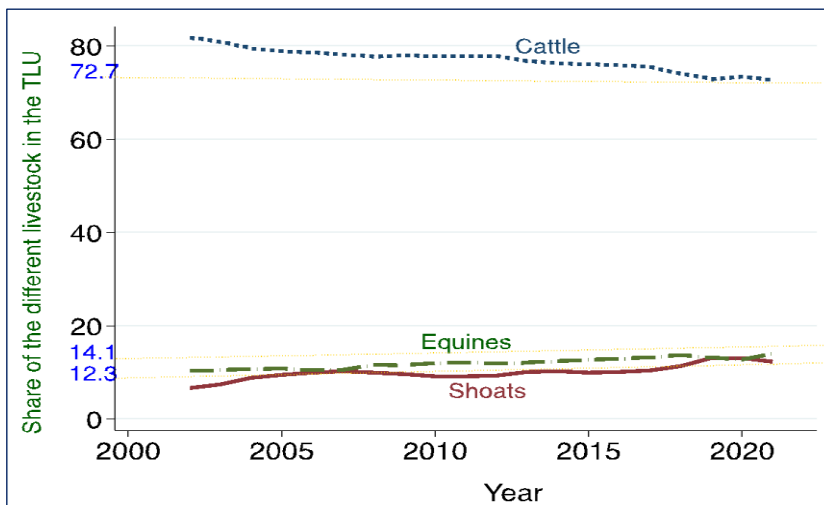
Figure 3.14: Share of livestock sub-sector in the agricultural and total GDP of the country



Source: Computed from data NBE, 2022

The country has abundant livestock resources and is ranked first in Africa and fifth globally in terms of livestock population, which comprises of over 66 million cattle, 38 million sheep, 46 million goats, 41.35 million poultry/chickens, 12.5 million equines, 7 million camel, and 5.98 million beehives (CSA, 2022). In the previous two decades, the cattle and shoat population of the country had some variation in which the population had significant reduction in the recent few years. The repetitive catastrophic natural factors may be the reason behind the recent cattle and shoat population reduction, which are managed in a nature dependent practice. Contrary to the cattle and shoat population of the country, the equines and camel population had linear increment.

In the previous two decades, livestock composition of the country has had some sort of shift as of the continuous reduction in the proportion of cattle, while shoats had significant increment. Figure 3.15 shows that the share of the cattle population in the overall TLU of the country has subsequently reduced in the previous three decades. It reduced from 81% to 72% between 2000 and 2019. In the previous two decades, the share of goats and equines in the TLU of the country had successive increments, wherein increment of the former was strong. Share of camels in the TLU of the country also had some increment in the previous decade.

Figure 3.15: Share of livestock population (% share from total TLU)

Source: Computed from data in ESS, 2022.

Livestock per capita holding of the country had significant variation as of the strong variability in the livestock population, especially cattle and shoat. Figure 3.16 shows that livestock per capita holding of the country ranges from 0.6 to 0.81 TLU in the previous two decades, which had significant variability. In the recent few years, per capita TLU holding of the country had significant reduction, which was a scenario that is an exact replica of the livestock population trend.

Rainfall variability significantly influenced herd dynamics as of herd die-offs and lower birth rates, which also considerably affected milk production and consumption of households (Kefyalew and Tegegn, 2012). The authors reported that in southern Ethiopia, cattle numbers dropped by 37% after the three consecutive years (1983 to 1985) drought, but the herd quickly grew significantly by 1990. In southern Ethiopia, cattle herd dynamics is strongly determined by rainfall variability (Abdeta and Oba, 2007). Droughts of the 1980s and 1990s

caused 49% herd losses in Borena area since the management is under the communal land use(Abdeta, 2011).

Figure 3.16: Livestock TLU per capita trend



Source: Computed by Computed from data in FAOSTAT (2001-2022) accessed in 2022

Ethiopia has made a better effort in improving the variety of poultry and cattle compared to the small ruminants, sheep and goats. Report of Ethiopian Statistical Services (2020/21) showed that 97.4% of cattle, 78.9% of poultry and 99% of sheep are indigenous breeds (Table 3.1). The proportions imply that 2.3% of cattle, 12% of poultry and 0.72% of sheep are hybrid types. Regarding adopting productive livestock, Ethiopia has about 9.1% of poultry and 0.3% of cattle are exotic brides.

Table 3.1: Livestock variety in the country

Livestock type	Indigenous	Improved
Poultry	78.04	21.96
Traditional Beehives	96.31	3.69
Cattle	96.93	3.07
Sheep	99.62	0.38
Goat	99.93	0.07

Source: Computed from data in ESS (2020/21)

Jatani (2023) identified that lack of veterinary services, climate change (drought, rainfall shortage, unpredictable weather patterns), poor infrastructural facilities, shortage of feed and water access are the core challenges of the livestock sector in the southern areas of Ethiopia. The FAO (2019) highlighted the rapid growth of urban and peri-urban farms around expanding cities as a source of several challenges. These include heightened competition for resources (land and water), increased pollution risks, misuse of antibiotics, and the potential for zoonotic disease outbreaks. Furthermore, the FAO noted that the livestock sector faces additional pressures from population growth and the expansion of mixed crop-livestock systems. These pressures are compounded by declining productivity, disease outbreaks, weak veterinary services, fragmented land, and natural resource degradation.

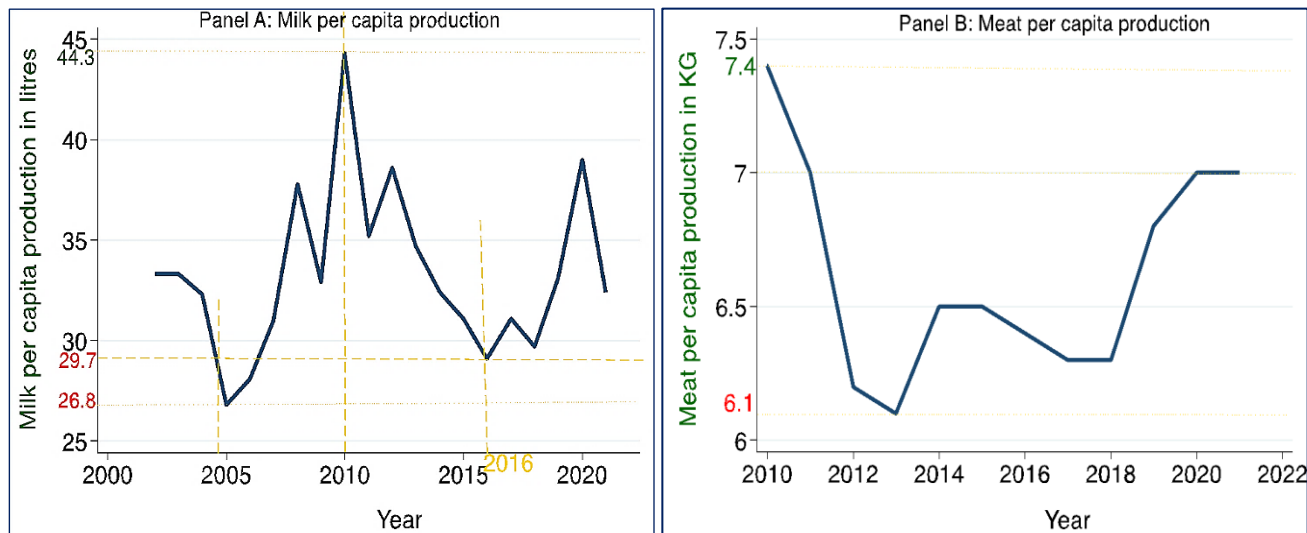
Research findings of scholars (Belete *et al.*, 2022; Getnet, 2022) revealed that unregulated livestock exports, climate change, ineffective extension services, limited market access, lack of improved breed, high incidence of diseases, and shortage of quality food are the crucial bottlenecks of the livestock sector in Ethiopia. By 2050, the FAO (2019) projects that Ethiopian smallholder farmers will

struggle to earn a living from livestock due to increased competition for resources and difficulty meeting food safety standards. Many may leave the livestock sector, often migrating from rural to urban areas for work. This is likely if current practices continue without significant government intervention.

3.2.4. Meat and milk production

In Ethiopia, milk is mainly produced from cows, however in some areas commonly among the pastoral community households collect milk from camels, goats and sheep. The amount from cows took the lion's share in the overall milk production of the country. There was a drastic increment in the total milk production of the country in some of the fiscal years such as 2008, 2010 and 2020, which was because of the significant cow milk increment. Figure 3.17 shows the fresh milk and meat per capita production trend of the country, which had had strong variability in the production of both. The country had a maximum of 44.3 liters per person per year in 2010, however, the amount drastically reduced to 29.7 liters in 2016, showing 33% reduction between 2010 and 2016. The El Niño in 2016 was one reason for the drastic milk production reduction of the country according to the report of Ethiopian Statistical Service. Per capita production of fresh meat of the country had similar movement in the previous decade. Meat per capita production of the country had significant reduction (17.6%) in between 2010 and 2013; however, it had some progress onwards the latter year (Figure 3.17).

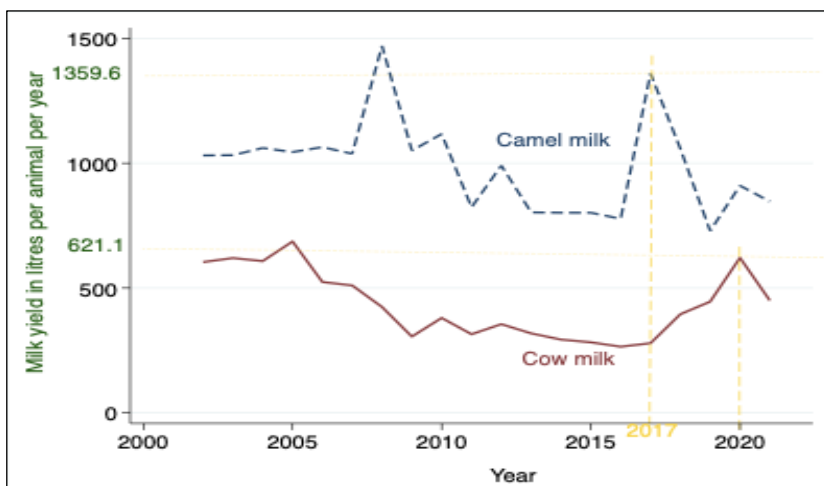
Figure 3.17: Trends of milk and meat per capita production



Source: Computed from data in FAOSTAT (2001 -2022) accessed in 2022

Compared to the yield a decade before, both camel and cow milk yield of the country had continuous reduction in recent times. Figure 3.18 shows that milk yield of the two main sources (cow and camel) had continuous reduction especially after the 2000s in which the country had the maximum cow milk yield (686.5 liters/cow/year), however, the improvement had no continuity. The figure shows that camels have a better yield than cows in all the fiscal years considered in the analysis. The camel milk yield of the country had significant variability in the previous three decades. Figure 3.18 reveals that milk yield of Ethiopia had strong variability; however, variability of camel milk yield was much stronger compared to the trend of cow milk yield. As to the figure, the maximum yield of camel milk was 1470.2 liters per year per camel in 2008, however, the yield drastically reduced to 700 liters in 2016. Variability in accessing and availability of feed may be the reason behind the strong variability of camel milk yield in the country in the previous two decades.

Figure 3.18: Trends of cow and camel milk yield in Ethiopia

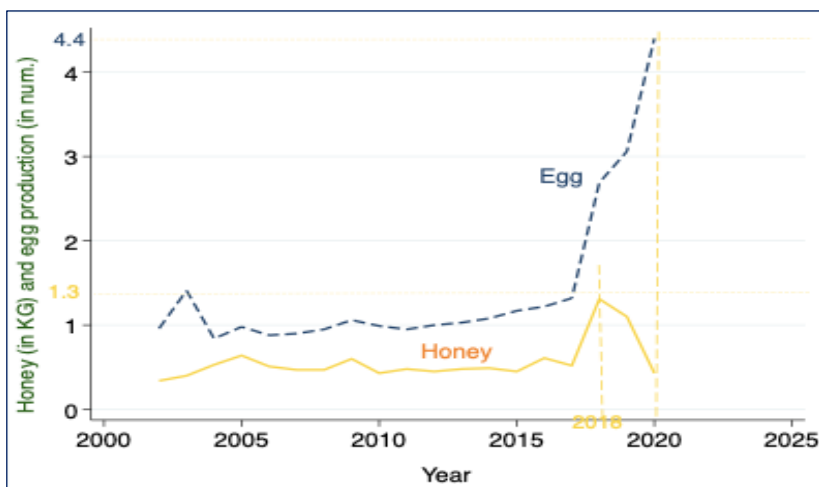


Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

3.2.5. Honey and egg production

The country has the potential of producing huge amounts of honey; however, the current production is mainly practiced in traditional methods, which finally results in lower production and productivity compared to the potential. Different reports confirmed that Ethiopia has the potential of producing 500,000 tons of honey, but the maximum production was 150,257.6 tons in 2020, which is about 30.05% of the potential. The better production in 2020 results in producing 1.31-kilogram per capita honey production in the fiscal year (See Figure 2.20). Significant proportion of the honey is sourced from traditional beehives, in which the production had significant increment in 2020 compared to the amount in the preceding years. About 94.43% of the honey produced within the country is collected from traditional beehives, while the country has huge potential to collect honey from improved beehives. As to the figure, the per capita honey production of the country had significant reduction in the recent few years.

Figure 3.19: Honey and egg production per capita trends in Ethiopia

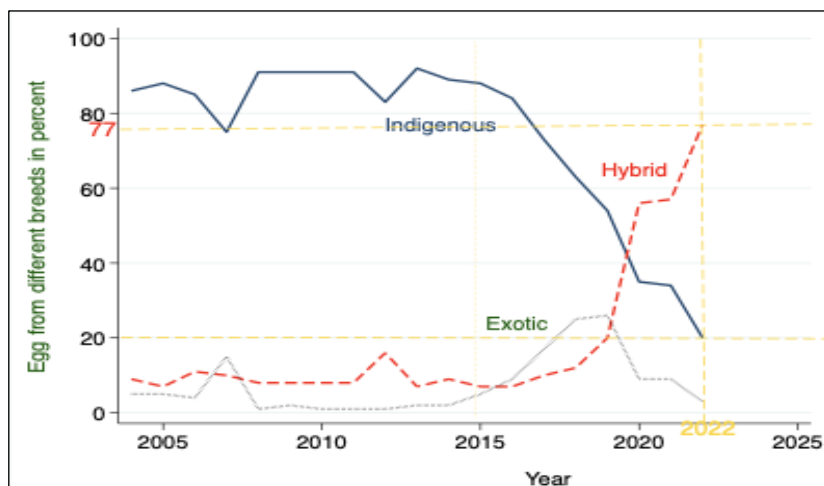


Source: Computed from data in ESS

In addition to the honey production, Figure 3.19 shows a trend of per capita egg production in which the country had a dramatic increase in the previous few fiscal years, especially after 2016. Per capita egg production of the country started to increase in 2015 and the maximum production was in 2022. The recurrent, significant increases in egg production nationwide can be directly linked to the adoption of improved, higher-yield chicken varieties by a large proportion of households.

Ethiopia had remarkable improvement in adopting improved (hybrid and exotic) chicken in the previous five years (between 2018 and 2022). Figure 3.20 shows that about 63% of the egg production was from indigenous breeds, however, the proportion reduced to 20% in 2022. This significant change implies that the country's poultry production is having a remarkable improvement as of adopting better productivity varieties. Based on the remarkable adoption, currently the country is collecting more than 805 eggs from improved varieties.

Figure 3.20: Percentage share of egg from different poultry breeds



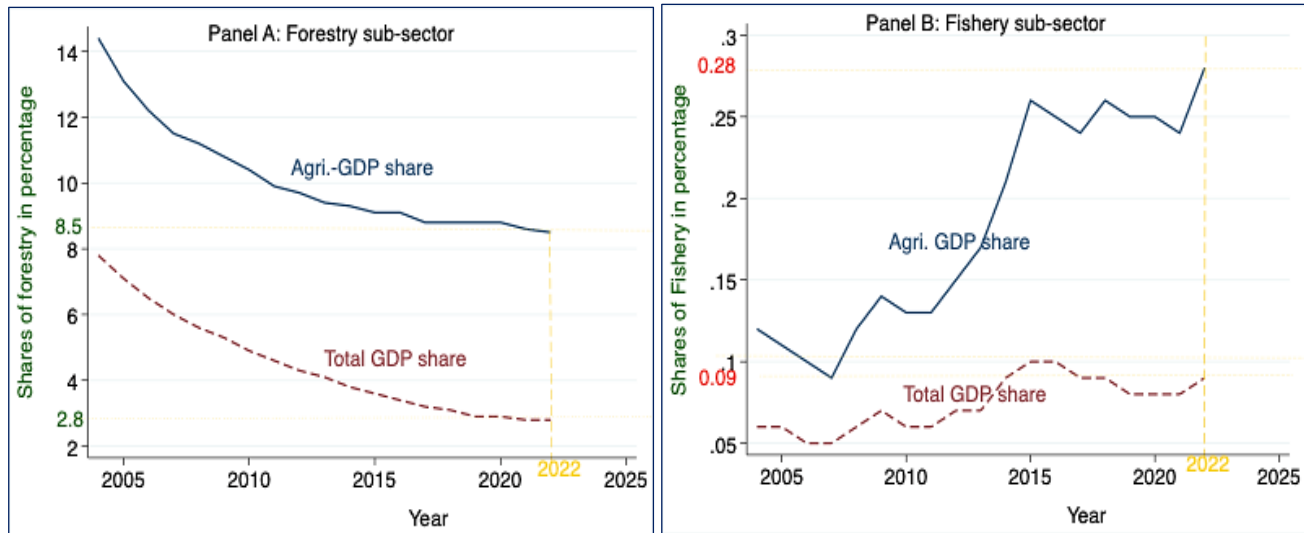
Source: Computed from data in ESS

3.2.6. *Performance of other sub-sectors*

It is unquestionable that Ethiopian agriculture mainly comprises crop, livestock, fishery, and forestry. However, a significant part of the agricultural GDP of the country mainly sourced from the former two (crop and livestock sub-sectors). Given this, fishery and forestry managements do have their share in the agricultural and overall GDP of the country, whereas the latter one has a relatively larger share. Figure 3.21 shows that the share of the forestry sub-sector in the overall and agricultural GDP of the country is decreasing with the going of time. Between 2003/04 and 2021/22 agricultural GDP contribution of forestry had reduced by 41%, which indicates 2.3% yearly reduction in the aforementioned time interval. Given this, the forestry management sub-sector of the country had a 64.1% reduction in the overall GDP contribution between 2003/04 and 2021/22, which implies a 3.6% per year reduction that is larger compared to the agricultural GDP contribution of the sub-sector, forestry.

Contrary to the GDP contribution of forestry, the fishery sub-sector of the country had progress in its contribution to the agricultural and overall GDP though the share is infinitesimal that is below 0.5% in the previous two decades. Though the share in agricultural GDP of the country is very low, contribution of fishery management had 57.1% increment in between 2003/04 and 2021/22, which indicates that the sub-sectoral contribution to the agricultural GDP of the country had 3.2% yearly increment in the previous two decades. Even though the rate of increment was not strong enough like the agricultural GDP contribution, fishery management of the country had some increment in the previous two decades.

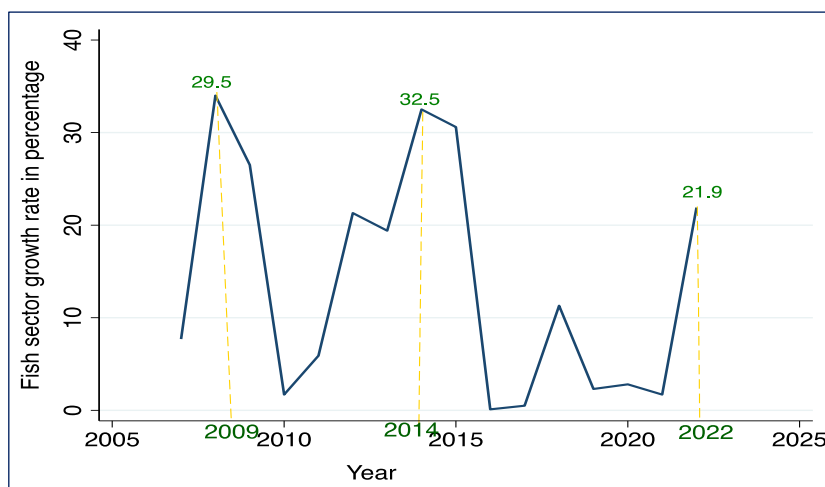
Figure 3.21: GDP contribution of forestry and fishery in Ethiopia



Source: Computed from data in the NBE (2005-2022) accessed in 2023

Annual report of the National Bank of Ethiopia showed that fishing sector of the country had a strongly varying growth rate in the previous two decades. In some of the fiscal years, the growth rate of the sub-sector was more than 25%, which was remarkable. However, the recent overall trend of the fishing sub-sector growth was decreasing as to the figure below.

Figure 3.22. Growth rate of the fishing sector at constant prices



Source: Annual report of NBE (2022)

3.3. Supply of Agricultural Products

3.3.1. Supply of crops

The agricultural product supply of the country sourced from domestic production (produced within the country) and imported from the outside world or the foreign market. Even though the former source took the dominant share in supplying agricultural outputs, the country frequently imported some proportion of outputs to fulfill the huge domestic demand. The United States Department of Agriculture

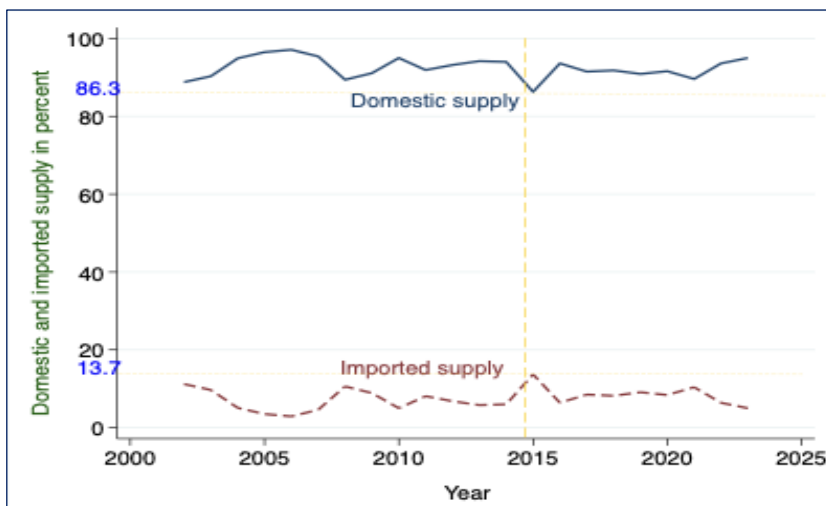
(USDA) and the Global Alliance for Improved Nutrition) (GAIN (2022) reported that wheat consumption demand of Ethiopia in 2021/22 was 7.38 million metric tons, which showed 2.9% increment over the amount demanded in the preceding year that was 7.17 million metric tons. Reports from the two institutions and others showed that the demand for wheat had surpassed domestic production, and the country imported about 1.4 million tons of wheat to fulfill the domestic consumption demand in 2022. Those institutions confirmed that the country currently fulfills about 81% of its domestic demand of wheat from its own production.

In the previous two decades the country on average imported 7.5% of its demand for major cereals such as wheat, rice, corn, barley and sorghum. Figure 3.23 reveals that both domestic production and total grain crops import of the country were growing parallel though the latter supply source had strong ups and downs in some of the fiscal years. Continuous increment of both domestic production and import of grain crops implies that the overall domestic demand of the country is upsurging continuously. Before two decades the country was importing about 13% of the domestic supply, but recently some progress has been observed regarding import substitution, which resulted in having only 5.3% imports. Regarding volume of imports, the country currently imports more than double the amount imported before two decades, which indicates that the country has a strong dependency on the foreign market to fulfil its domestic demand.

Paradoxically, the country with the potential of producing more than its domestic demand, it still imports crops to satisfy domestic demand. Wheat and Rice are the top two agricultural imports of Ethiopia in recent times. Report of the International Trade Administration (ITA) (2024) showed that Ethiopia imported \$3.6 billion worth of agricultural and food products in 2022 showing 5% increment compared to the amount in the previous year, and the country is categorized as a net

importer of agricultural and food commodities. In 2022, Ethiopia imported \$375 million worth of agricultural products from the United States, which showed a 157% increase from the value imported in 2021.

Figure 3.23: Percentage share of domestic and imported supply of major cereal crops



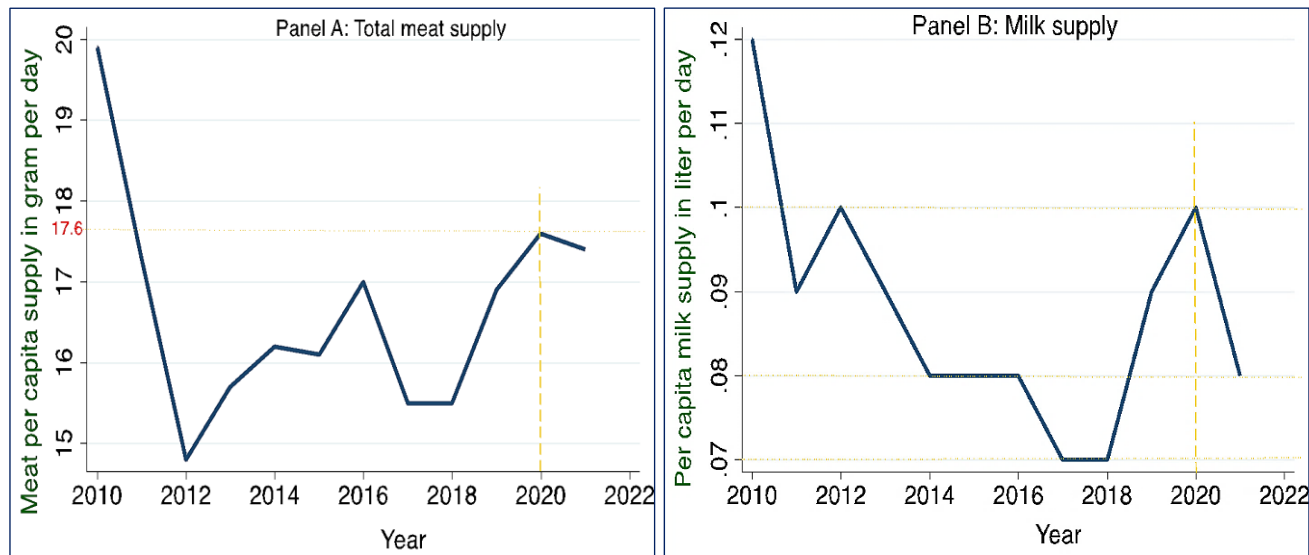
Note: Major crops include wheat, maize (corn), sorghum, barley, and millet

Source: Computed from data in ESS and USDA

3.3.2. Supply of livestock products

Panel A of Figure 3.24 shows the domestic meat supply per capita in gram per day, which shows strong variability in the previous decade. In the previous decade (2010 to 2022) meat and milk per capita supply of the country were decreasing subsequently in a similar trend. For instance, the per capita meat supply of the country decreased from 19.9 grams per day to 15.5 grams per day per individual, while the milk supply decreased from 0.12 to 0.07 liters per day per person in between 2010 and 2018. Though the per capita supply of both meat and milk was reduced, the rate of reduction for milk was much stronger.

Figure 3.24: Total meat and milk supply per capita in Ethiopia



Source: Computed from data in FAOSTAT (2010-2022) accessed in 2022.

3.4. Agricultural Inputs

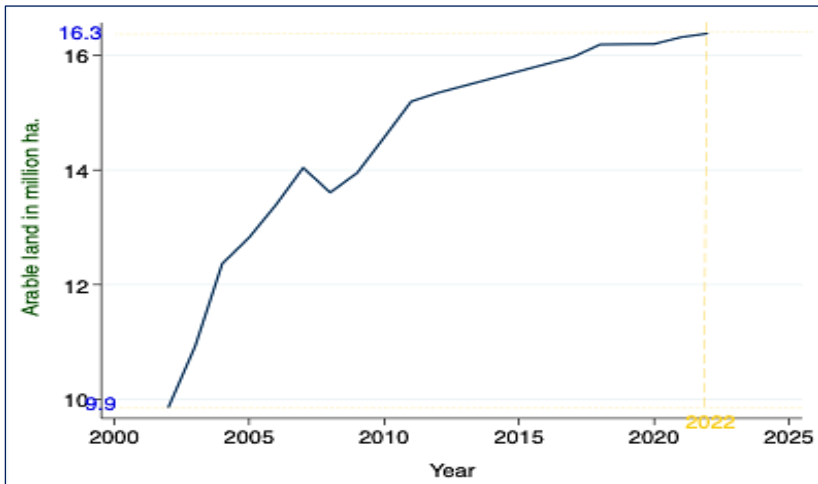
Agriculture of the country is mainly practiced by traditional inputs, which are not productive enough and capable to secure transformation of the sector. Reports of Ethiopian Statistical Service indicate that the sector is dominated by small-scale farmers who mainly practice rain-fed mixed farming by employing traditional technologies, adopting a less productive inputs and production system. Smallholder farmers of the country tilled about 95% of the total area under agricultural use and they produced more than 90% of the total agricultural output of the country.

3.4.1. Cropland allocation

Ethiopian Statistical Service (ESS) (2022) reported that the average holding sizes per household and holder were 0.92 and 0.90 hectares, respectively. Given this, the average cropland area was 0.78 and 0.76 hectares per household and holder, respectively, in the fiscal year. Though it did not clearly mention the reason behind the increment in the landholding, the World Bank Group reported that average household landholding (ha) for rural Ethiopia was 1.1 ha in 2022. The organization also reported that the average cultivated land holding of rural Ethiopia was 0.8 ha in the aforementioned fiscal year.

Figure 3.25 shows that arable land holding of the country had a continuous increment in the previous two decades. The arable land allocation of the country increased at a decreasing rate between 2003 and 2022, which resulted in 3.3% yearly increment. The continuous arable land allocation increment implies that the country has continuously shifted non-agricultural lands into cropland, which may result in a continuous distraction and distortion of forest and conserved areas. Recently, the country allocated 16,314,000 ha. of land for crop production.

Figure 3.25: Dynamics of total arable land in Ethiopia (million ha)



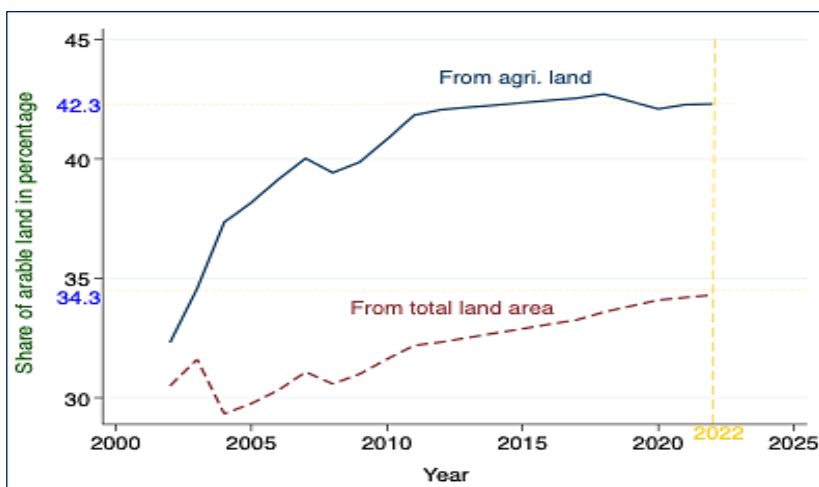
Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

Within a decade Ethiopia increased its agricultural land by 3.2% after shifting forest and conserved lands. Agricultural land area, which could be decomposed into cropland and livestock grazing land, had a continuous increment in the country that is mainly due to shifting of forest lands. The natural forests and conserved land of the country have been distracted and transformed into agricultural land. In the previous decade (from 2010 to 2021) the country shifted huge forests and conserved lands to agricultural use. This implies that the continuous agricultural land increment of the country is at the expense of the forest land.

Though the country has huge potential agricultural land, the proportion allocated for crop production is below 50% in most fiscal years. Figure 3.26 shows that arable land share from the overall agricultural land of the country was below 45% in the previous two decades. The figure reveals that a significant increment was observed in 2004 in the arable

land share from the available agricultural land in the country. Arable land share of the country was about 32% for years before 2002, but it continuously increased to 42% in 2022. This continuous increment in the arable land of the country implies that significant land use and cover change was observed in the country.

Figure 3.26: Share of arable land from agricultural and total land area



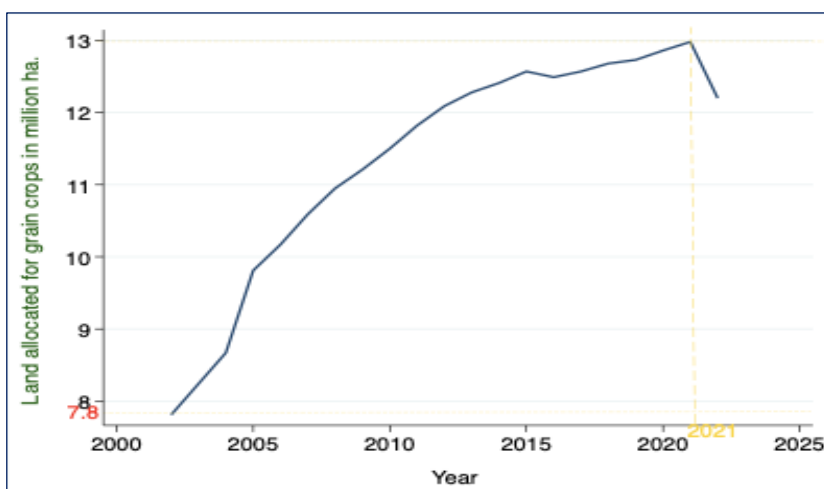
Source: Computed from data in FAOSTAT (2001 -2022) accessed in 2022

Ethiopia had significant and continuous increment in the land allocated for grain crops, since the recurrent effort and focus of the government is food security and increasing food crop production and supply. Figure 3.27 shows that the cropland allocated for producing grain has a continuous increment though the rate of increment was not consistent. Starting from 2006, grain cropland allocation of the country was more than 10 million hectares. In line with this, grain cropland allocation of the country reached 13 million hectares in 2021 after having 3.3% yearly increment in between 2002 and 2021. In the previous two decades the country allocated a significant proportion of the arable land

it had for producing grain crops. Consider the trend of the following figure: grain cropland allocation of the country was increasing at a decreasing rate in the previous two decades.

In the country cropland allocated for cereals had positive change or progress in the previous two decades. The overall variability in the grain cropland allocation of the country was strong determined by the variability of cereal crops that took the significant proportion of the land allocated for grain crops in the country. ESS (2021/22) reported that the percentage change in the cropland allocated for pulses and oilseeds had significant variability in the previous two decades, wherein negative growth rate was observed in few of the fiscal years especially in recent times. Significant proportion of the grain cropland of the country was allocated for cereals. In the previous two decades the country allocated about 80% of the grain cropland for cereals. Land allocated for pulses and oilseeds of the country had strong variability, which could imply that overall production and supply of those crops could also had strong variability.

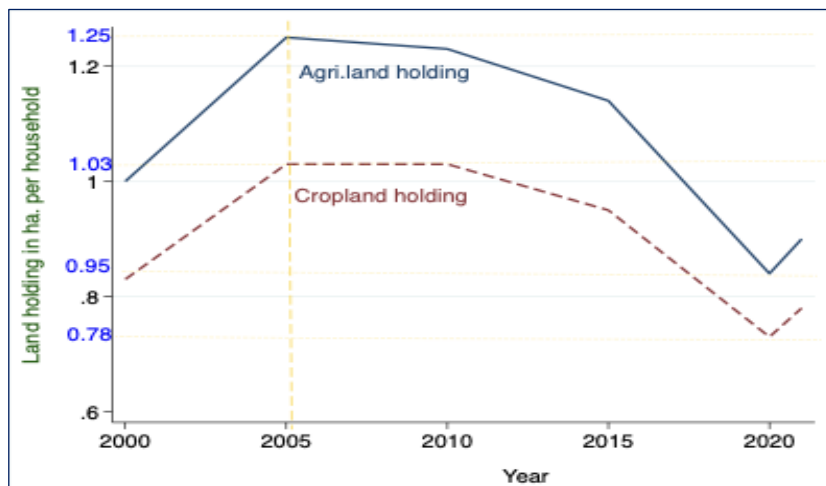
Figure 3.27: Land allocated for grain crop production (million ha)



Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

After successive and continuous reduction, land holding of households in Ethiopia showed a progress in between 2020 and 2021. Figure 3.28 shows that between 2005 and 2020 the average landholding of households was going down. The highest land use holding of the country was 1.2 ha land per household in 2005 and 2010, however, the ratio successively reduced to 0.83 in 2020 after 10 years. But the reduction in the total agricultural land holding was reversed in 2021 and the average holding had increased. Similar circumstances had been observed regarding cropland holding of households. Compared to the agricultural land holding, smallholders' cropland holding of the country was relatively lower in each fiscal year since some proportion of it left for grazing and other activities.

Figure 3.28: Total land and cropland holding of households in Ethiopia (ha)



Source: Computed from data in ESS accessed in 2022

3.4.2. Chemical fertilizer

In between 1960 and 2021, Ethiopia had an average inorganic fertilizer usage of 10.9 kg per hectare of arable land. Compared to the amount utilized (0.1 kg per hectare) in 1961, the country had significant improvement in 2021 by applying 42.1 kg per hectare of arable land. Though there was significant increment in the inorganic fertilizer utilization of Ethiopia, but the current application of the country is much lower compared to the world average that is 161.5 kg per hectare of arable land. Figure 3.29 shows that fertilizer consumption per hectare on arable land of Ethiopia had ups and downs in the previous two decades. In some fiscal years such as 2014 the consumption had a drastic reduction, however, the overall trend had an increasing trend. This continuous increment in application rate indicates that smallholders who dominate agriculture of the country are having a better awareness regarding inorganic fertilizer application to enhance crop production.

Figure 3.29: Fertilizer consumption in Ethiopia (kg per ha)



Source: Computed from data in FAOSTAT (2001 -2022) accessed in 2022

Tsedeke and Endeshaw (2024) argued that inorganic fertilizer use increased by 3.16% whereas organic fertilizer use declined by 2.24% annually between 2006 and 2019. The authors reported that in the current practice Ethiopia's inorganic fertilizer application rate is about 35 kg/ha that is below the African Union recommendation of 50 kg/ha. Given the low adoption of inorganic fertilizer, there is no due attention in using inorganic fertilizers as per the recommended rate and soil nutrient deficiencies.

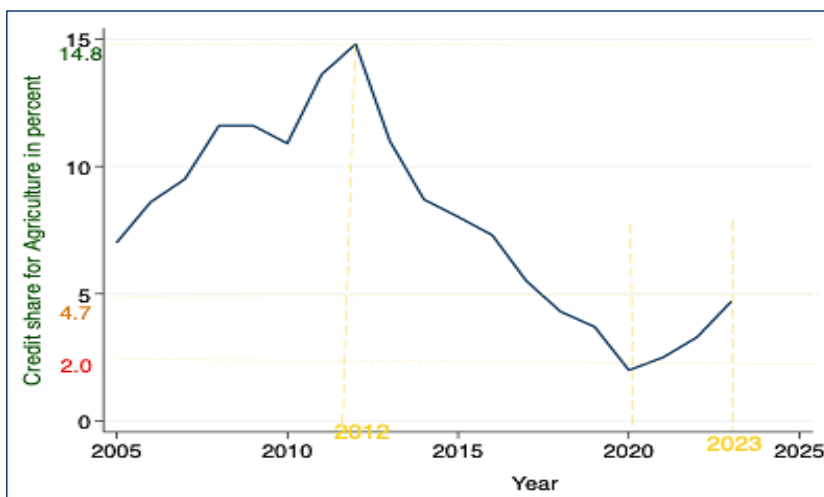
Overall, inorganic and organic fertilizers covered about 62% and 12%, respectively, of the total cultivated area in 2017–2019 (Tsedeke and Endeshaw, 2024). The use of biofertilizers among Ethiopian smallholders has not been accorded the due attention commensurate with its economic and environmental benefits. Consumption of manure as a source of fuel in the form of cow dung may be one reason for the reduction in using inorganic fertilizer.

The usage of manure as a replacement is crucial (Fahad *et al.*, 2022). Organic fertilizer is one of the agricultural technologies that have been believed to lower direct production costs, improve environmental benefits, and raise crop yields, according to (Kassie *et al.*, 2009). Reports of different institutions revealed that in Ethiopia, organic fertilizer consumption is considered very low, with most farmers utilizing minimal amounts despite its promotion by the government; only a small percentage of farmers use organic fertilizer, and even among those who do, application rates are significantly below recommended levels due to factors like cost, access, and knowledge gaps about its use. Unlike those reports, Bizuwork *et al.*, (2023) reported that between 2004/05 to 2020/21 crop season the number of households who applied organic fertilizer for maize and sorghum than tef, wheat, and barley crops were increasing.

3.4.3. Credit access

In the previous two decades (2002 to 2022), agriculture collected an average of 7.8% of the total outstanding credit, while industry and trade collected 20.1% and 14.12% on average. In 2021/22 banks disbursed Birr 427.9 billion as a fresh loan, which was 29.9% higher than a year ago. In the fiscal year agriculture gained about 5% of the total fresh loan allocated at national level. Figure 3.30 shows that the agriculture of the country had not the demanded amount of credit to manage the different activities of the sector collected the maximum proportion of 14.8% in 2012, however, the proportion continuously reduced at a drastic rate and recently the sector got below 5% of the yearly credit allocated among sectors and sub-sectors. In recent times especially, in the previous decade (2012 to 2022), agriculture of the country collected below 5% of the outstanding credit.

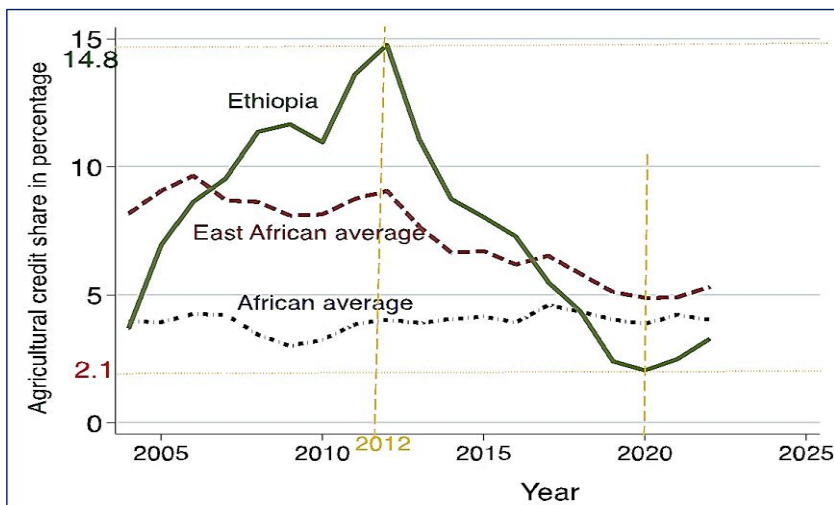
Figure 3.30: Percentage of outstanding credit allowed for agriculture



Source: Computed from data in the NBE (2005 -2023) accessed in 2023

In the previous two decades African countries did not allow agriculture to access more than 4% of the national level credit allocated among sectors. Figure 3.31 shows credit share of agriculture, which was consistently below 5% for African countries on average, and it was far-below the percentage allocated by East African countries. The percentage share of agriculture from the total credit allowed within the economy was continuously reducing in east African countries, which includes Ethiopia wherein the reduction was drastic especially in recent times (after 2012). Though it is decreasing continuously, agriculture in Ethiopia has better credit access compared to the situation in Africa and east Africa countries. The current credit share of agriculture in Ethiopia is below 4% that is even lower than the credit which African and east African countries allocate for the sector.

Figure 3.31: Credit share of agriculture (% of total credit)



Source: Computed from data in FAOSTAT (2001-2022) accessed in 2022

3.5. Constraints in Agricultural Sector

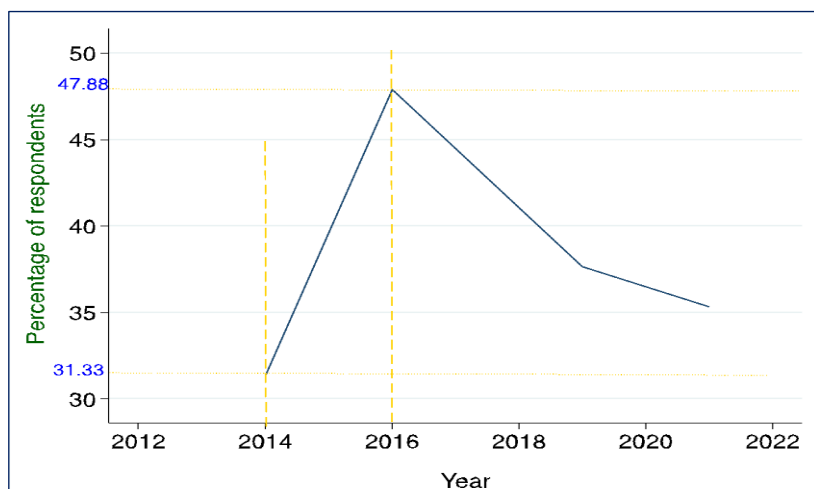
Low inputs use (fertilizer, pesticide, improved seeds), low levels of irrigation, soil degradation and erosion, inadequate agricultural research and extension, market and institutional problems are the main constraints that deter productivity growth of Ethiopian agriculture (Alemayehu *et al.*, 2011). The authors also argued that systemic obstacles to the Ethiopian agriculture and rural transformation can be summarized as lack of sustained and intergenerational commitments, constitutional and legal constraints, crowding out of the private sector leadership, lack of mechanization and input supply constrained, lack of effective and accountable organizational capacity, lack of agricultural and rural financial facilities and environmental degradation. Gebissa and Manuel (2021) reported that shortage of farmland, climate change, fragmentation and degradation of farmland, leapfrogged constructions and urbanizations, pests, lack of integration among stakeholders, and political instabilities are the recurrent potential factors that affect agriculture of Ethiopia. World Bank (2004) identified that poor performance of Ethiopia agriculture is because of high rainfall variability, lack of irrigation facilities, weak rural institution, limited access to improved varieties, lack of mechanization, low investment in agricultural research, weak rural infrastructures and skills on the demand side, and poor market linkages. The current lower productivity of Ethiopian crop production is mainly because of natural, institutional and artificial factors as to the report and findings of different scholars and institutions.

3.5.1. *Natural factors*

Frequent drought and erratic rainfall are common factors that affect agricultural outputs and reduce crop yield as well as income of households (Melese, 2019; Tufa, 2019). Variations and fluctuations in rainfall and temperature compromise, among others, the productive

performances of the agricultural sector and make rural households at risk (Shekuru *et al.*, 2020). Figure 3.32 shows that more than 30% of the households in the rural areas faced crop damage in the different fiscal years. The situation was not consistent, which means the crop damage prevalence was severe in some of the years, which resulted in affecting many of the households. The proportion implies one-third of the rural households had the prevalence of shocks that reduced the cropland area harvested and production as well as productivity. The crop damages from different problems that may be artificial or nature based. The second figure reveals that some of the crop damages result in reducing the area harvested significantly.

Figure 3.32: Households' response to the incidence of crop damage

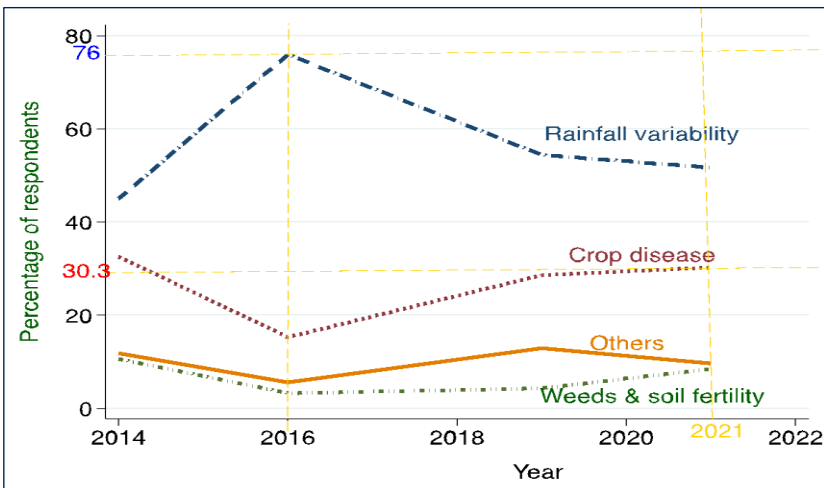


Source: Computed from LSMS data in the ESS and the World Bank (waves 2-5)

Table 3.33 shows that rainfall invariability was the main factor in charge of crop damage in rural areas of the country. Significant proportion of the crop damage was sourced from rainfall variability that is below the normally required for crop production. Crop disease and

insects and locust outbreak was also one crucial reason for the severe crop damage in the country. Wild animal infestation and destruction are also one critical reasons for the crop damage in rural areas of the country.

Figure 3.33: Main challenges that reduce smallholders' crop production



Source: Computed from LSMS data in the ESS and the World Bank (waves 2-5)

Disease outbreak has been identified as one of the main factors for low productivity of the livestock sub-sector (Mulat *et al.*, 2004). The country loses about 30-50% of the total value of livestock products every year due to diseases. In line with this, feed shortage commonly exemplified by under-nutrition and malnutrition are among the major constraints of livestock production in Ethiopia. Successive and continuous expansion of croplands in most parts of the country is at the cost of grazing land on which smallholders' livestock production strongly depend.

3.5.2. *Institutional and infrastructural facilities*

Underdevelopment of roads and other infrastructure has hindered livestock management of Ethiopia as to the report of different institutions. In the agriculture of Ethiopia: there are also institutional and policy related problems such as lack of institutional stability that strongly deter performance of the sector. Land tenure issues have been a longstanding problem in Ethiopia, with unclear property rights leading to disputes and inefficiencies (Getachew, 2018). The fragmentation of land holdings among smallholders also limit economies of scale and their ability to invest in modern agricultural practices. Knippenberg *et al.* (2020) reported that in Ethiopia, land fragmentation resulted in food insecurity and increased the amount of time spent moving from one parcel to another which lowered agricultural output and reduced productivity. AfDB (2012) also identified that Ethiopian agriculture is struggling against challenges like weak marketing infrastructure, which commonly result in huge costs. The institution also identified that limited use of improved farming practices by smallholders is an important factor contributing to the low productivity of the sector in the country.

UNDP (2022) limited rural infrastructure, such as roads and storage facilities, makes it difficult for farmers to transport and store their produce efficiently. Additionally, inadequate market linkages result in low prices and reduced profitability for farmers. Another critical obstacle to agricultural and rural transformation is legal and constitutional, that is the prevailing property rights that have produced land fragmentation, persistently declining land per capita, and an increasingly landless population (Getachew, 2018). The author also identified that there is no single organization that is directly responsible for, or dedicated to, support agricultural mechanization, or indeed rural transformation.

3.5.3. *Conflicts and political instabilities*

The political unrest and conflict resulted in loss of both private and publicly owned agricultural resources such as mechanized farm equipment, shelters, floriculture, warehouses, shops, seeds, and other tools of the agricultural sector (FAO, 2019). Global Agricultural Monitoring Research (2014) reported that the northern Ethiopian conflict has had a significant impact on agricultural production of the three affected regions. The report also affirmed that starting from onset of conflict in November 2020, production in the north part of the country has been further impacted by both direct attacks on the agricultural sector, such as restricted field access, supply and transportation blockages, intruding seeds, looting and destruction of farm equipment and livestock, and burning and pillaging of crops by armed forces. Moreover, the conflict had indirect consequences on the agricultural practices because of farmers displacement, field abandonment, market disruptions, economic downturn, and input shortages. Reports of international organizations showed that as the conflict escalated, the two regions (Tigray and Amhara) had collected below-average yields in 2021 and 2022.

UNDP (2022) reported that agriculture of the country is projected to be affected by both the conflict as well as the current drought. Due to the recurrent conflicts, the agriculture of the country faced significant damage and production reduction. In different parts of the country the conflict results in millions of quintals of crop losses. Reports of different institutions showed that outbreak of conflicts and instabilities in the different corners of the globe directly result in fertilizers' cost increment, which directly result in significant reduction in agricultural production.

3.5.4. *Input and output prices*

Farmers often struggle to access credit and financial services, which directly limit their capacity to invest in modern inputs, technologies, and sustainable practices. Limited credits and financial services delivery, and largely inaccessible to the vast majority of the farming population, the slow pace of agricultural services has retarded development in agriculture, and indeed in other sectors of the economy, perpetuating other national level problems like hunger and poverty. Inadequate capital and recurrent budget allocations to the livestock sub-sector have also contributed to its low productivity.

Additionally, smallholder farmers recently faced input upsurge, and sometimes the supply is not as good as the demand. Land shortage is chronic in most parts of the country, which results in severe degradation of soil and forest resources in search of additional croplands (Getachew, 2018). The author also identified that input delivery inefficiency of government institutions is common in Ethiopia. This problem mainly arises from inaccurate and/or delayed demand estimates and distribution to smallholders, especially chemical fertilizers, pesticides, and herbicides. It has all helped to make prices of agricultural inputs and machinery unaffordable.

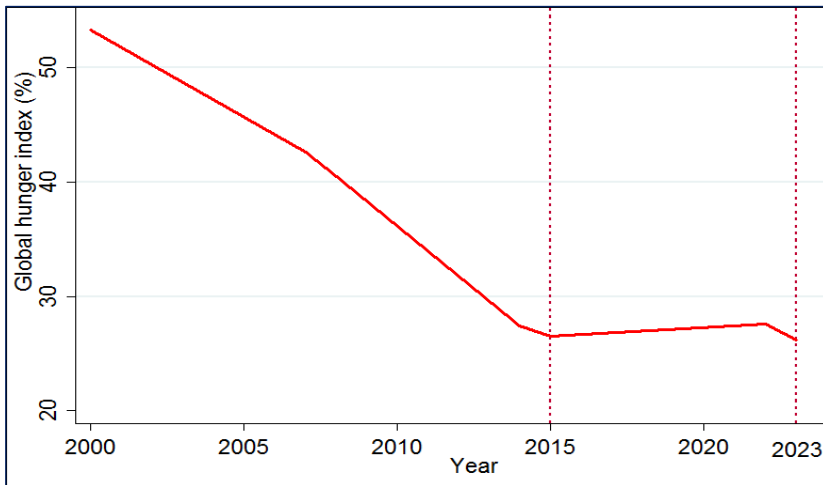
3.6. Food Security

3.6.1. *Hunger*

The Global Hunger Index (GHI) and Concern (2022) reported that in 2021 Ethiopia ranked 90th out of 116 countries in the four basic GHI indicators, which include malnutrition, infant malnutrition and infant mortality. The recurrent position of the country is a shocking figure that requires the intervention of all stakeholders to have strong improvement. In this regard, the 2021 GHI report and the brief report on Ethiopia will provide an opportunity for all stakeholders to come

together, reflect on the current situation, and make practical recommendations. In the 2023 GHI, Ethiopia ranked 101st out of the 125 countries, which imply that the country is going worst position compared to the performances before years. With a score of 26.2 in the 2023 GHI, Ethiopia had a “*serious*” level of hunger. Report of the Concern World showed that the main challenge that aggravates hunger and undernutrition in Ethiopia is the long-lasting conflict and instability in the different corners of the country. Figure 3.34 below shows that Ethiopia had significant achievement in reducing the child undernutrition and mortality in between 200 and 2015, which resulted in having a better GHI score that run from about 54 in 2000 to about 28 in 2015. However, the progress did not sustain in the previous few years to further reduce the problem of hunger in the country.

Figure 3.34: Dynamics of hunger in Ethiopia



Source: Computed from data in Concern Worldwide and GHI

Comparing Figures 3.34 and 3.35, it is easy to check the status of Ethiopia in the different levels of hunger. Based on the threshold of

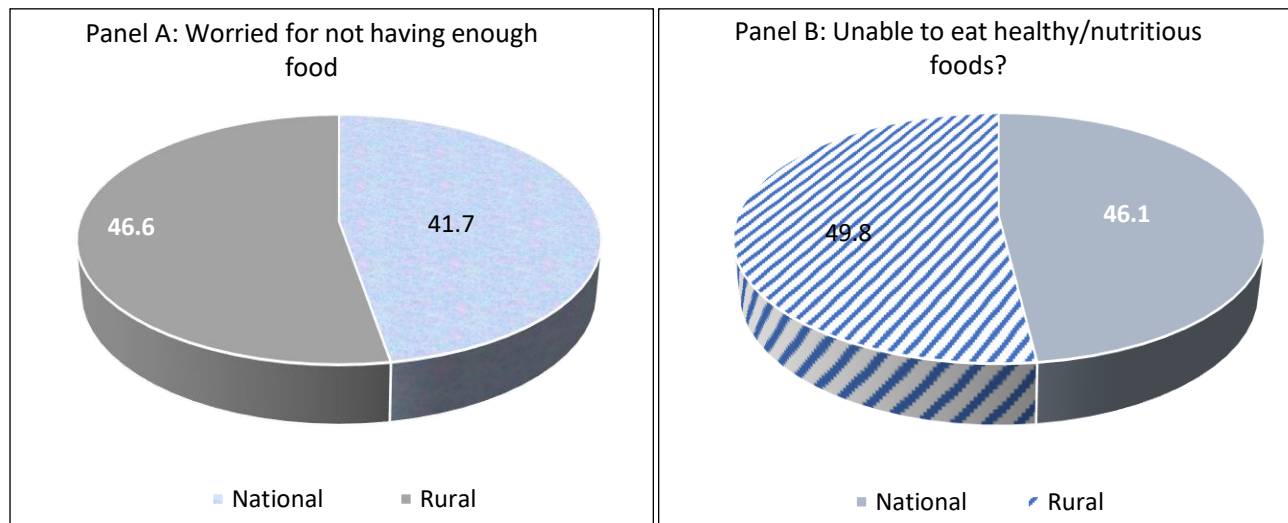
Figure 3.35: Hunger in Ethiopia is serious



3.6.2. *Perceived food security*

Accessing enough food and nutritious diet were critical problems of the rural population of Ethiopia compared to the urban. Figure 3.36 shows households' response regarding how they are worried about not having enough food to eat in the previous 12 months. Panel A of the figure shows that about 42% of the national level households had a worry regarding food availability for about twelve months. In this regard, a relatively large number (47%) of rural households were worried about not having enough food to eat. The proportion implies that rural households had relatively more suffering from the food shortage problem in the country. Panel B of the figure shows that about 50% of the households in the rural areas were unable to eat healthy/nutritious foods in the last 12 months because of the difficulty to access. Accessing healthy and nutritious food was difficult for both the rural and urban households of Ethiopia, but the problem was severe for the former ones.

Figure 3.36: Response of households regarding food availability in the last 12 months



Source: Computed from LSMS (wave 4) data in the CSS and the World Bank

Table 3.2 shows that more than half of the households in both rural areas and at the national level had a one to two times shortage of food in the 12 consecutive months of 2020. About 59% of the rural households had a shortage of food to eat one to two times within a year. Given this, about 27% of the rural households had food shortages about three to ten times within the year. More than 10 times the food shortage was there for about nine percent of the rural households. Leaving aside the nutrition and healthiness of the food, rural households of the country had better access to food for the 12 consecutive months of 2020. Based on the figures in the table about 94% of the rural households had less food to eat at least once within the twelve consecutive months of 2020.

Table 3.2: Frequency of eating less food for 12 consecutive months

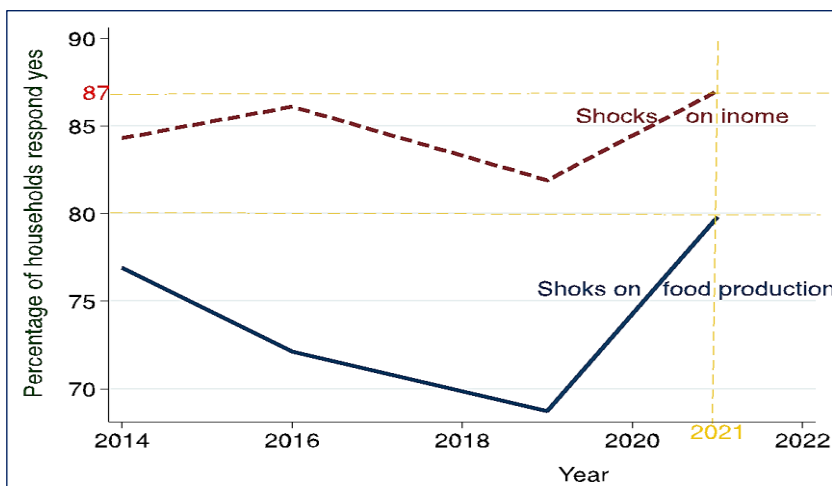
Incidence of food shortage	National	Rural
One to two times	54.8	58.6
Three to ten times	28.9	26.6
More than 10 times	9.4	9.0
Don't Know	6.9	6.0

Source: Computed from LSMS data (wave 4) in the CSS and the World Bank

3.6.3. Households' Response to Food Security Shocks

Figure 3.37 shows that shocks that happened in rural Ethiopia affected the food production and income of the households in different dimensions. In different fiscal years, many of the rural households (more than 80%) reported that the shocks significantly reduced the food production and income of households. The figure also shows that a significant proportion of the households reported that their income was reduced.

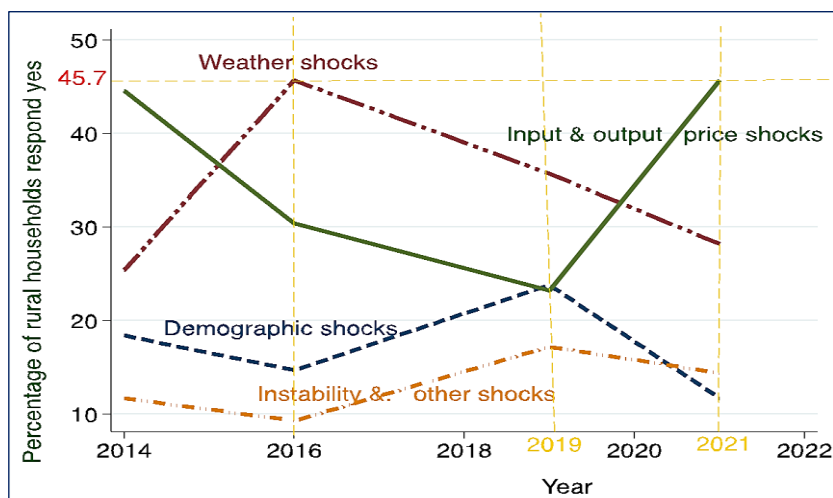
Figure 3.37: Dynamics of households' response to shocks of food and income



Source: Computed from data in LSMS (waves 2-5) in ESS and the World Bank

Rural households of the country frequently suffer from various problems that significantly reduce food production. The two prominent shocks that reduce production and income of the rural households are crop damage from weather variability, and price increment (for both input and output) as to the response of many of the households (Figure 3.38). In 2020/21 about 46% of the rural households respond that the main challenge that reduces the food production and availability is sourced from input and output price increment, which implies that the recurrent inflation is a critical challenge that severely reduces the food production and availability in rural areas of Ethiopia.

Figure 3.38: Shocks that reduce food production and availability among rural households



Source: Computed from LSMS data (waves 2-5) in the ESS and the World Bank

3.7. Concluding Remarks

The agricultural share of the total aggregate output of the country has been considerably declining over time especially after 2004/05 and currently it is about one-third of the national GDP. This continuous reduction was due to the successive increment in the share of the service sector, which recurrently resulted in having demand-driven economic progress. Hence, focus should be given to the supply-side of the economy to have balance between the aggregate demand and supply.

Recently, both pulse and oil crop production per capita of the country had a continuous reduction, while there is a persistent demand increment as of population growth, expansion of agro-processors, urbanization, internal displaced population, and household income increment. Hence, attention from concerned government offices should

be given to adopting technologies and strategies to improve productivity, which could save the country from importing to fulfill domestic demand.

In recent years, Ethiopia had remarkable improvement in adopting improved (hybrid and exotic) chicken, which resulted in significant production and productivity increment. However, in the previous two decades, the livestock composition of the country showed a shift towards shoats and equines as of the continuous reduction in the proportion of cattle. Thus, equal attention should be given to each livestock type to have diversified livestock products by reducing risks.

Within a decade Ethiopia increased its agricultural land by 3.2% after shifting forest and conserved lands. This implies that the continuous agricultural land increment of the country is at the expense of the forest land. Hence, attention and focus should be given to forest and conserved lands, but not only to crop production in order to have sustainably conserved natural resources.

Though the country has made a recent improvement in its inorganic fertilizer utilization, the current application is much lower compared to the world average that is 161.5 kg per hectare of arable land. This improvement of the country is because of smallholders' better awareness regarding inorganic fertilizer application. The concerned government and stakeholders should try to exert efforts to have sustainable supply and utilization of inorganic fertilizer to enhance the crop production and productivity of the country.

In the previous two decades (2002 to 2022) the agriculture sector of the country got an average of 7.8% of the total outstanding credit, while industry and trade collected 20.1% and 14.12% on average, respectively. In 2021/22 agriculture gained below 5% of the total fresh loan allocated at national level, which implies that the sector did not

have the demanded amount of credit access to manage the different activities. Hence, the prominent and conspicuous sector in export earnings and domestic industrial input supply, should get easy access to finance, which is a crucial input in adopting technologies and access to production inputs.

Natural shocks that happened in rural Ethiopia significantly affected the food production and income of the households. Shortage of farmland, climate change, fragmentation and degradation of farmland, leapfrogged constructions and urbanizations, pests and disease outbreak, lack of integration among stakeholders, and political instabilities and conflict are the recurrent potential factors that affect agriculture of Ethiopia. Policymakers and practitioners should be clairvoyant and pro-active to create awareness for the producers in order to reduce risks.

The three-years average prevalence level between 2020 and 2022 is more than a quarter (21%) of the total population suffering from a severe food insecurity problem. Accessing enough food and nutritious diet were critical problems of the rural population of Ethiopia, and many of the households' seriously worried about food availability. Thus, all the necessary efforts should be made to enhance production and marketing of agricultural products to facilitate easy access of food.

References

- Abay A. (2011). Construction of Soil Conservation Structures for improvement of crops and soil productivity in the Southern Ethiopia, *Journal of Environment and Earth Science*, 1(1), 2011.
- Abdeta A. and Oba G. (2007). Relating long-term rainfall variability to cattle population dynamics in communal rangelands and a government ranch in southern Ethiopia. *Agricultural Systems* 94,715-725.
- Abdeta A. (2011). Effects of drought on cattle herd dynamics and its implication on local livelihood systems in Borana, Ethiopia. Food Security Center (FSC) Brief No 1, 1-6.
- AfDB (Africa Development Bank). (2012). African Economic Outlook, Ethiopia, 2012. www.africaneconomicoutlook.org.
- Alemayehu S. T., Paul D., and Sinafikeh A. G. (2011). Crop Production in Ethiopia: Regional Patterns and Trends. Ethiopia Strategy Support Program II (ESSP II) ESSP II Working Paper No. 0016 March 2011. https://essp.ifpri.info/files/2011/02/ESSP2_WP16_Crop-Production-in-Ethiopia-Regional-Patterns-and-Trends.pdf
- Alemu Z. G., Oosthuizen L. K., and van Schalkwyk H. D. (2002). Agricultural development policies of Ethiopia since 1957. *South African Journal of Economic History*, 17(1-2), 1–24 doi:10.1080/10113430209511142.
- ATA (Agricultural Transformation Agency). (2014). Ethiopia national mechanization strategy.
- Belay M., Abegaz A., and Bewket W. (2017). Livelihood options of landless households and land contracts in north-west Ethiopia. *Environ Dev Sustain*, 19(141), 164. <https://doi.org/10.1007/s10668-015-9727-x>
- Belete K. A., Mulugeta T. A., and Sharew M. H. (2022). Opportunities and Challenges for Pastoral Beef Cattle Production in Ethiopia. <https://doi.org/10.1155/2022/1087060>
- Bizuwork T. D., Almaz M. G., Alemayehu Z. and Sisay E. T. (2023). Fertilizer Use Trends for Major Ethiopian Crops by Smallholder Farmers. *Ethiopian Journal of Crop Science*, Vol 11 No.1.

- De Janvry A. and Sadoulet E. (1989). Investment strategies to combat rural poverty in Latin America, *World Development* 17(8).
- Degye G., Arega S., Lamessa T. and Demirew G. (2022). Inflation and the Ethiopian Economy; Constraints, costs, drivers and policy options. A book, published by the Ethiopian Economics Association, ISBN 978-99944-54-85-3.
- Dessalegn R. (2009). Cooperatives, state farms & small holder production, in Pausewang *et al*, *op cit*, p 100-09.
- Diriba G. (2020). Agricultural and rural transformation in Ethiopia: Obstacles, triggers and reform considerations policy working paper. https://media.africaportal.org/documents/Agricultural_and_rural_transformation_in_Ethiopia.pdf
- Dorosh P., Schmidt E. and Shiferaw A. (2012). Economic Growth without Structural Transformation: The Case of Ethiopia. *Journal of African Development*, 14(2), 7-40. <https://doi.org/10.5325/jafrideve.14.2.0007>.
- Dorosh P. A. and Bart M. (2020). Ethiopia's agri-food system: Past trends, present challenges, and future scenarios. Washington, DC: International Food Policy Research Institute (IFPRI). <https://doi.org/10.2499/9780896296916>.
- Fahad S. Bai D., Liu L., and Baloch Z. A. (2022). Heterogeneous impacts of environmental regulation on foreign direct investment: do environmental regulation affect FDI decisions? *Environmental Science and Pollution Research*. (2022) 29, no. 4, 5092–5104, <https://doi.org/10.1007/s11356-021-15277-4>
- FAO (Food and Agriculture Organization of the United Nations). (2017). The future of food and agriculture –Trends and challenges. Rome.
- FAO (Food and Agriculture Organization of the United Nations). (2021). <https://www.fao.org/faostat/en/#data>
- _____. (2019). Africa Sustainable Livestock 2025. The future of livestock in ETHIOPIA: Opportunities and challenges in the face of uncertainty. <https://openknowledge.fao.org/server/api/core/bitstreams/ae17206a-4be3-432d-8c0e-d077227f4d78/content>

- Gebissa Y. W. and Manuel T. M. (2021). The challenges and prospects of Ethiopian agriculture. *Cogent Food & Agriculture*; Volume 7, 2021 -Issue 1. <https://www.tandfonline.com/doi/full/10.1080/23311932.2021.1923619#abstract>
- Gebreselassie, S. (2006). Land, land policy and smallholder agriculture in Ethiopia: Options and scenarios. Discussion Paper 008. www.future-agricultures.org.
- Getachew Diriba. (2018). Agricultural and Rural Transformation in Ethiopia: Obstacles, Triggers and Reform Considerations: *Ethiopian Journal of Economics* Vol. XXVII No 2, October 2018.
- Getnet Assefa. (2022). Setting the Scene: Livestock Production and Feed Resources in Ethiopia. Accelerating Impacts of CGIAR climate Research for Africa. <https://cgspace.cgiar.org/server/api/core/bitstreams/b063d2b9-75be-4152-857b-060e0f6c4a21/content>.
- Gibbs, H. K., and Salmon, J. M. (2015). Mapping the world's degraded lands. Elsevier, *Applied Geography*, 57, 12–21. <https://doi.org/10.1016/j.apgeog.2014.11.024>.
- Global Agricultural Monitoring Research. (2014). Northern Ethiopia: Conflict and Food Insecurity. <https://cropmonitor.org/index.php/cmreports/food-security-conflict-reports>
- Helina Tilahun and Emily Schmidt. (2012). Spatial Analysis of Livestock Production Patterns in Ethiopia. Working Paper. <https://www.Ifpri.Org/Publication/Spatial-Analysis-Livestock-Production-Patterns-Ethiopia>
- Hirschman A. O. (1958). *The strategy of economic development*, New Haven, 1958
- International Trade Administration (ITA). (2022). Ethiopia country commercial guide. Agricultural Sector. <https://www.trade.gov/country-commercial-guides/ethiopia-agricultural-sector>.
- International Trade Administration (ITA). (2024). Ethiopia-country commercial guide; Agricultural sectors. <https://www.trade.gov/country-commercial-guides/ethiopia-agricultural-sectors>

- Jatani E. (2023) Challenges of Livestock Productivity and Market System of the Pastoralists in Borena Zone, Southeast, Ethiopia. *Journal of Animal Science Livestock Production*. 7:31.
- Johnston B. F., and Mellor J. W. (1961). The role of agriculture in economic development, *American Economic Review*, 51(4), Pp 566-93.
- Kassie M., Zikhali P., Manjur K., and Edwards S. (2009). Adoption of Organic Farming Techniques: Evidence from a Semi-arid Region of Ethiopia, 2009, JSTOR, New York, NY, USA.
- Kefyalew A. and Tegegn F. (2012). The effect of climate change on ruminant livestock population dynamics in Ethiopia. *Livestock Research for Rural Development*. Volume 24, Article #185. Retrieved January 29, 2025, from: <http://www.lrrd.org/lrrd24/10/kefy24185.htm>.
- Melese G. (2019). Farmer's response to climate change and variability in Ethiopia: A review. *Cogent Food & Agriculture*, 5:1, 1613770. <https://doi.org/10.1080/23311932.2019.1613770>
- Ministry of Finance (MoF). (2021). Macro-Fiscal Performance in Ethiopia and Recent Fiscal Policy Developments, Addis Ababa, October 2021. No. 04/2021.
- Ministry of Health. (2022). Global Hunger Index Launched in Ethiopia. https://www.moh.gov.et/en/node/337?language_content_entity=en
- Mulat, D., Fantu, G. and Tadele, F. (2004). Agricultural Development in Ethiopia: are there alternatives to food aid?, Addis Ababa University, Addis Ababa, Ethiopia.
- NBE (National Bank of Ethiopia). (2022), Annual Bulletin 2021/22, Addis Ababa, Ethiopia.
- Planning and Development Commission, (No year). Ten years development plan: A pathway to prosperity: 2021-2030. https://www.ircwash.org/sites/default/files/ten_year_development_plan_a_pathway_to_prosperity.2021-2030_version.pdf
- Raul Prebisch. (1959). Commercial policy in the underdeveloped countries, *American Economic Review*, 49, Pp 251-73.

- Shekuru, A. H., Berlie, A. B., and Bizuneh, Y. K. (2020). Variability and trends of temperature and rainfall over three agro ecological zones in North Shewa, central Ethiopia. Research Square, 1–22. <https://doi.org/10.21203/rs.3.rs-53268/v1>
- Tsedeker A. and Endeshaw H. (2024). Ethiopia Has Yet to Meet the African Union Fertilizer Recommendation. The Untold Stories of African Agriculture: Lessons from Ethiopia. pp. 254-264. <https://doi.org/10.1079/9781800626386.0017>.
- Tufa, Z. D. (2019). Effects of climate variability on development of wheat rust diseases (*Puccinia* spp.) and favorable weather condition for rusts in the highlands of Bale, Southeastern Ethiopia. *Academic Research Journal of Agricultural Science and Research*, 7(2), 63–74. <http://www.academicresearchjournals.org/ARJASR/Index.htm>
- United States Department of Agriculture (USDA). (2022). United States Department of Agriculture, Foreign Agriculture Service, Grain and Feed Annual report of Ethiopia. Report Number: ET2022-0014.
- _____. (2024). Ethiopian wheat imports by year. <https://www.indexmundi.com/agriculture/?country=et&commodity=wheat&graph=imports>
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA). (2024). Ethiopia: Update on Flooding as of 24 May 2024). <https://reliefweb.int/report/ethiopia/ethiopia-update-flooding-24-may-2024>.
- UNDP. (2022). Quarterly Economic Profile. <https://www.undp.org/sites/g/files/zskgke326/files/2023-03/QEPE%20JULY%202022.pdf>.
- World Bank Group. (2023). Ethiopia Socioeconomic Panel Survey 2021/22 survey report. Addis Ababa, Ethiopia.
- Zerihun G. A. , Lukas K. O. and van Schalkwyk H. D. (2002). Agricultural development policies of Ethiopia since 1957, *South African Journal of Economic History*, 17:1-2, 1-24, DOI:10.1080/10113430209511142.

4. PERFORMANCE OF THE INDUSTRIAL SECTOR

4.1. Introduction

Manufacturing is a cornerstone of economic development. It creates jobs, generates foreign exchange, and ultimately, elevates the quality of life for citizens. Research by McMillan and Rodrik (2011) highlights a crucial challenge faced by developing nations: the vast disparity in productivity between traditional and modern sectors. In countries like Ethiopia, this gap is particularly evident. Manufacturing serves as the key to bridging this divide, fostering a process called "structural transformation". The manufacturing sector has the potential to create quality jobs and enhance productivity. Ethiopia's rapidly growing working-age population, with over 2 million new entrants to the workforce annually, requires a significant number of quality jobs (ILO, 2022). Manufacturing offers these opportunities and absorbs the labor from low-productivity sectors, particularly the subsistence agriculture of the country. Furthermore, as workers shift from traditional sectors to manufacturing, overall productivity increases. The manufacturing sector is crucial for establishing backward and forward linkages, particularly between agriculture and within manufacturing itself, which could enable the country to produce high-valued economic output and create a stronger economy.

Ethiopia's manufacturing sector has the potential to be a major driver of the country's economy. However, there are some key challenges that are currently limiting its performance. One of the main issues is the sector's limited economic impact. As of 2023, it contributes only 4.6% to Ethiopia's GDP, which is even lower than the 5.9% it contributed in 2019. This decline shows that the sector is vulnerable to economic disruptions (UNDP, 2023).

Another challenge is job creation. While the sector employs 5% of the workforce, it has not been able to create enough new jobs to keep pace with the country's demand. Recent economic shocks have even forced nearly 450 manufacturing firms to close, further reducing employment opportunities. Ethiopia also relies heavily on imported inputs for manufactured goods. Currently, it produces and satisfies only 38% of domestic demand, with the remaining 62% imported from the outside world (UNDP, 2023). This huge import dependency weakens the manufacturing sector's contribution to the country's overall economic sustainability.

The sector also struggles with limited exports. Only 5% of manufacturing firms were involved in exporting goods between 1995 and 2020. This means that Ethiopia is not earning much foreign currency from the sub-sector, and it also hinders its capability to compete globally (UNDP, 2023).

Finally, the manufacturing sector is dominated by small and micro-enterprises. These businesses are often less productive than larger companies, which limits the sector's overall efficiency. There are very few large firms (only 2.2%) and even medium-sized businesses make up just 7.5% of the sub-sector. This lack of larger companies means the sector is missing out on the benefits of economies of scale.

4.2. Methodology

This chapter draws upon a rich tapestry of data sources to paint a comprehensive picture of Ethiopia's manufacturing sector. Data from the following sources were used.

- **Ethiopia Statistical Services (ESS):** We leveraged data from the ESS's Large and Medium Scale Manufacturing Survey (LMSMS) to gain insights into the sector's size, composition, and activity

levels. This data allows us to track trend's structure, in size and regional distribution within the sector.

- **National Bank of Ethiopia (NBE):** Data from the NBE, specifically focusing on value added and export contribution, is crucial for understanding the sector's economic impact. We analyzed how much the manufacturing sector contributes to Ethiopia's Gross Domestic Product (GDP) and its role in generating foreign currency through exports.
- **United Nations Industrial Development Organization (UNIDO):** UNIDO's data on manufacturing competitiveness and export performance provides a valuable external perspective. This allows us to benchmark Ethiopia's manufacturing sector against international standards and identify areas for improvement.
- **Industrial Parks Development Corporation (IPDC):** Data from the IPDC sheds light on the role of industrial parks in fostering growth of the manufacturing sector. We used this data to examine how the IPDCs attract investments, create jobs, and contribute to export diversification.

The analysis of this diverse data set employs a descriptive approach, focusing primarily on trend analysis and percentage changes. By tracking changes over time, the chapter aims to identify growth patterns, emerging trends, and potential challenges within the manufacturing sector. Additionally, analyzing data in terms of percentages allows for a more nuanced understanding of the sector's relative contribution to the economy and its export performance.

4.3. Industrial Policy of Ethiopia

The government's current industrialization push is not new following a series of past attempts, some less successful than others. However, earlier efforts provided valuable experience in manufacturing. While

20th century Ethiopian manufacturing focused on consumer goods through import-substitution industrialization (ISI), recent policies have arguably yielded better results. Despite this progress, manufacturing still plays a minor role in job creation, overall production, exports, and technological advancement of the country. It's far from becoming the driving force for sustained growth and economic transformation.

4.3.1. Industrial policy 1992-2018

Upon taking power in 1991, the EPRDF prioritized agricultural recovery, viewing it as a catalyst for renewed industrialization. In 1994, the regime adopted the Agricultural Development-Led Industrialization (ADLI) strategy, which remained in place for over two decades. A shift came in 2003 with the introduction of the Industrial Development Strategy (IDS), which emphasized:

- **Export-oriented industries:** Boosting exports became a key focus.
- **Labor-intensive manufacturing:** Creating jobs was a priority.
- **Infrastructure development:** Improving infrastructure was seen as crucial for economic growth.
- **Small business development:** Encouraging small enterprises aimed to create mass employment and reduce poverty.

The EPRDF implemented economic liberalization policies with support from the World Bank, IMF, and other donors. While these reforms fell under the umbrella of "Structural Adjustment Program (SAP) and liberalization," they were not a complete adoption of the Washington Consensus. For instance, Ethiopia's approach to privatization was more gradual compared to Eastern Europe or Mozambique (Oqubay, 2015). Some of the privatization strategies adopted by the government during this period were:

- Over 300 firms privatized: Most were acquired by domestic businesses.
- Strategic sales to foreign firms: Some large firms (like breweries) were sold to foreign investors to promote growth and secure foreign currency.
- Retention of key sectors: Unlike other African economies, Ethiopia held onto strategic industries like utilities, airlines, chemicals, and sugar. These public enterprises were instead expanded and reorganized as state-owned enterprises.
- Improved governance in state-owned enterprises: The government introduced reforms to improve how these companies are run, with some success.

Since the early 2000s, Ethiopia has actively shaped its industrial development through a range of well-defined policies. These policies aim to boost exports and attract productive investment, facilitate industrial financing and leverage state-owned enterprises (SOEs) to guide strategic industries. The focus has been on specific sectors with growth potential, such as leather and leather products, apparel and textiles, meat and food processing, beverages, cement and steel, and horticulture.

Both Growth and Transformation Plans (GTP I and II) prioritized industrial development, however, the former plan focused on Micro and Small Enterprises (MSEs). It recognized their potential for job creation, entrepreneurship growth, and overall industrial development. Strategies were designed specifically to support the expansion of MSEs. However, these strategies need further strengthening to fully unlock their potential in boosting local economies, fostering entrepreneurship, and reducing unemployment and poverty in future planning periods.

GTP I also prioritized the development of large and medium-scale manufacturing. The plan aims to achieve this through export-oriented industrialization, primarily driven by the private sector. While progress was made, export performance fell short of the ambitious targets of the plan. In 2014/15, the final year of the plan, manufacturing exports reached only USD 409 million, a mere 22.5% of the targeted USD 1.82 billion. Similarly, the textile and garment industry, a key sub-sector, secured export earnings of USD 98.1 million, which although significantly improved from the baseline year, still fell far short of the USD 1 billion target set for the end of the plan period (FDRE, 2016).

The second GTP II placed a strong emphasis on the manufacturing sector as a key driver of the Ethiopian economy and structural transformation. The plan aims to transform manufacturing into a leading force in several areas:

- **Increased production and productivity:** The manufacturing sector was expected to become a significant contributor to the overall output and efficiency of the economy.
- **Boosting exports:** The goal was to significantly increase foreign exchange earnings through manufactured goods.
- **Technology transfer and skills development:** The plan aimed to attract new technologies and improve the skills of the workforce within the manufacturing sector.
- **Job creation:** Manufacturing was expected to be a major source of new employment opportunities.

The government implemented a two-pronged strategy to achieve the goals: expanding investments in export-oriented manufacturing to attract new businesses and boost existing industries to improve competitiveness.

In GTP II, the role of the manufacturing industry was more heavily emphasized. The goal was for it to take a leading role in production, productivity, contribution to export earnings, technology transfer, skills development, and job creation. By fostering increased value addition and the productive capacity of the sector, the aim was to substantially increase the quantity, quality, and variety of manufactured goods. This would have in turn rendered the manufacturing industry a major source of foreign exchange earnings. It had also targeted to reduce foreign exchange spending by substituting imports of strategic products with local ones and enabled the manufacturing industry to play a more important role in the overall economy.

4.3.2. Industrial policy in the post-2018 period

Ethiopia's new government, taking office in 2018, prioritized economic reforms to achieve sustainable economic growth. A key part of this plan was the Home-Grown Economic Reform Agenda (HERA) launched in 2019. This agenda aimed to maintain financial stability and reignite economic growth, building on past successes. The government identified a strong manufacturing sector as crucial for creating jobs and transforming the economy to absorb the continuously increasing working-age population of the country. Focus has been given to establishing industrial parks, attracting investment through promotion, and offering tax holidays. Furthermore, to address the challenges the sector is facing and improve its performance and enhance its contribution to the national economy, the government is taking key reform measures.

The first reform agenda is revisiting and enhancing the role of Industrial Parks in the development of the manufacturing sector. Addressing the challenges hindering investment by providing land, infrastructure, logistics, and streamlined customs processes to attract Foreign Direct Investment (FDI) and boost manufacturing.

Strengthening the backward linkage of emerging manufacturing value chains and promoting import-competing industries to leverage large domestic market size is also among the government priorities: Strengthening these backward linkages and promoting industries that compete with imports to leverage Ethiopia's large domestic market.

Furthermore, the reform targeted at enhancing the productivity of firms and workers. While manufacturing productivity has grown moderately (4.6% per year) over the past 20 years, it has been stronger in capital-intensive industries (those using more machines) than labor-intensive ones (employing more workers). This suggests the overall economy is not becoming more efficient in using resources

Deepening ease of doing business initiatives is also among the key reform agendas. Manufacturing sector development calls for addressing cross-cutting challenges in the business climate including business licensing and registration procedures, logistics and power constraints, weak policy and regulatory government support institutions and support systems for industrial parks.

4.4. Structure of the Manufacturing Sector

The manufacturing sector of Ethiopia is dominated by food and beverages, which covers about 36% of large and medium-scale industries within the country in 2020. This has only shown an increment from about 34% in 2015. This is followed by wood and wood products including furniture works and paper industries (Table 4.1).

Table 4.1: Structure of Ethiopia's manufacturing sector

2020		2015	
Industry group	Share (%)	Industry group	Share (%)
Food and beverages	36.09	Food and beverages	33.68
Leather and textile	12.78	Non-metallic mineral products	9.44
Wood, wood products and paper	19.47	Fabricated metal products	9.17
Chemicals and pharmaceuticals	9.26	Chemicals and chemical products	8.55
Nonmetallic	11.87	Leather and footwear	8.03
Basic and fabricated metal	4.08		
Electronics and equipment	6.46		

Source: Computed from data in ESS (2020) and UNIDO (2015)

Ownership of Ethiopia's manufacturing sector is dominated by private entities. In 2018, 96% of the manufacturing industries were owned privately (Table 4.2). This figure appears to have remained relatively constant, except for a slight increment to 97.95% in 2020. This increment might be attributed to the recent government efforts to liberalize the economy and create a more conducive environment for private businesses.

However, a closer look at the private sector ownership reveals a shift in structures. While individual ownership remains the most common form, with 43% of establishments in 2018, its share has dipped slightly to 42% in 2020. This decrease is counterbalanced by a small rise in

partnerships (up from 17% in 2018 to 9% in 2020) and share companies (from 5% to 3%) as preferred ownership models.

Table 4.2: Forms of ownership in the manufacturing sector

Ownership	Unit	2018	2020
Public	%	4	2
Private	%	96	98
Individual ownership	%	43	42
Partnership	%	9	17
Share company	%	5	3
Private limited company	%	31	25
Cooperatives	%	10	11
Others	%	1	2

Source: Computed from data in ESS (2018 and 2020)

There appear to be variations in the distribution of manufacturing establishments across regions of the country. Addis Ababa remains the leader in terms of the number of establishments, sharing about 39% in both periods. Oromia region takes the second with its share increasing from about 26% in 2018 to 33% in 2020 (Table 4.3).

Several regions, including Afar, Somali, Benishangul-Gumuz, and SNNP, have seen a decrease in their share of manufacturing establishments. Availability of infrastructure such as transportation networks, proximity to the capital city, and access to utilities are among the factors attracting establishments to certain regions within the country.

Table 4.3: Regional distribution manufacturing establishments

Region	2018		2020	
	Number of Establishments	Share (%)	Number of Establishments	Share (%)
Tigray	255	7.03	-	-
Afar	16	0.44	14	0%
Amhara	489	13.48	477	16%
Oromia	942	25.97	1008	33%
Somali	26	0.72	11	0%
Benishangul-Gumuz.	8	0.22	3	0%
SNNP	297	8.19	242	8%
Gambella	1	0.03	13	0%
Harari	36	0.99	16	1%
Addis Ababa	1430	39.43	1188	39%
Dire Dawa	127	3.5	95	3%
Total	3627	100	3067	100

Source: Computed from data in ESS (2018 & 2020)

4.5. Performance of the Manufacturing Sector

4.5.1. Manufacturing value added (MVA)

The manufacturing sector has experienced volatile growth over the past five years (Table 4.4). It had a growth rate of 5.5% in 2017/18, but this slowed down to only 4.8% in 2021/22. The construction sub-sector dominates the share of industries, consistently accounting for over 70% between 2017/18 and 2021/22. The sector has shown a consistently

higher growth rate than manufacturing, although it is also on a slight downward trend. Manufacturing holds the second-largest share among the industries listed, though its share has dipped slightly overtime. It has shown a positive but slowing growth rate. It peaked at 7.7% in 2018/19 and has steadily declined since, reaching 4.8% in 2021/22. This is mainly due to a decline in public investment and challenges in accessing inputs mainly the cement industry (UNDP, 2023).

Table 4.4: Growth of the manufacturing sector

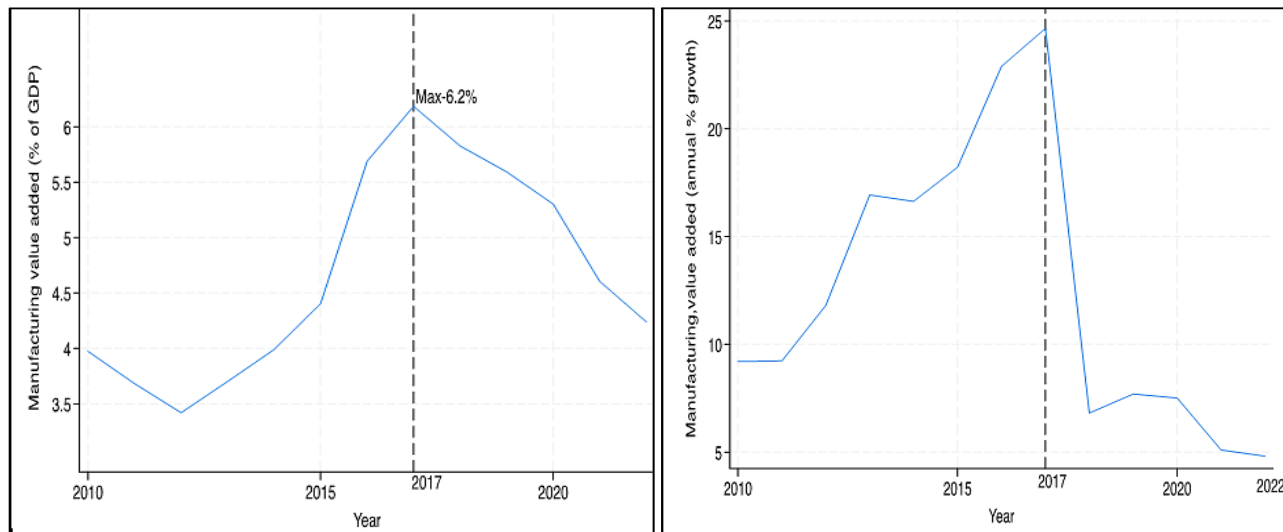
	Year				
	2017/18	2018/19	2019/20	2020/21	2021/22
<i>Growth rate (%)</i>					
Mining and quarrying	-20.8	-21.9	91.4	115.4	6.1
Manufacturing	5.5	7.7	7.5	5.1	4.8
Electricity and water	3.3	4.0	7.2	9.2	6.0
Construction	15.7	15.0	9.9	6.6	4.9
<i>Share in industry (%)</i>					
Mining and quarrying	0.7	0.5	0.9	1.8	1.8
Manufacturing	25.3	24.3	23.9	23.4	23.4
Electricity and water	2.6	2.7	2.6	2.7	2.7
Construction	71.4	72.5	72.6	72.2	72.2

Source: Compiled from data in the NBE (2023)

Manufacturing sub-sector has seen a worrying decline, with its share of the national economy shrinking from 6.2% in 2017 to 4.3% in 2022 (Left panel of Figure 4.1). Following this, the growth in the sub-sectoral value addition has shown a sharp decline from 25% in 2017 to less than 5% in 2022 (right panel of Figure 4.1). This significant drop is attributed to a combination of challenges. For instance, nearly 450 manufacturing companies across the country, representing almost 10% of the total, have been forced to shut down in 2022. A major contributor to this trend is the deteriorating security situation in the country, particularly the conflicts in the Oromia and Amhara regions. These conflicts create strong difficulties for businesses, hindering their capability to operate effectively (UNDP, 2023).

The decline in the manufacturing sub-sector poses a threat to Ethiopia's economic development. It emphasizes the need to address the security challenges and create a more stable environment for businesses to thrive.

Figure 4.1: GDP share and growth of manufacturing value added



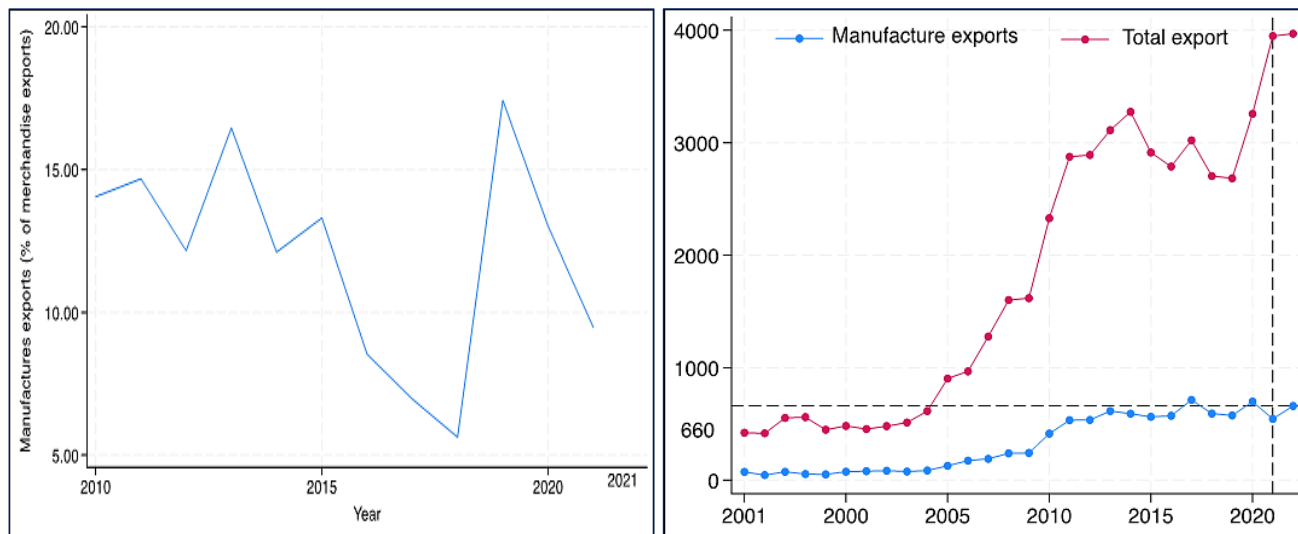
Source: Computed from data in the World Bank (2010-2022)

4.5.2. *Export contribution*

The export contribution of Ethiopia's manufacturing sub-sector as a percentage of total merchandise export is depicted in Figure 4.2. In 2010, manufactured goods made up 14% of the total merchandise exports of the country. By 2021, the proportion dropped to 9.5%. Ethiopia's total export earnings appear to have increased between 2001 and 2014 (Figure 4.2). This period coincides with the period when the manufacturing sub-sector export earnings started increasing, mainly after 2010. This suggests a period of successful growth in the manufactured goods exports, potentially due to government initiatives such as exempting all export taxes and provision of incentives including land and capital for the sub-sector.

While manufacturing exports peaked at around \$700 million USD in 2017, its growth appears to have stalled or even declined since then. Data from the UNDP (2023) shows that in 2023, the manufacturing sub-sector only contributed 13.8% (\$500 million USD) to Ethiopia's export earnings of \$3.6 billion USD. This highlights the continued dominance of agriculture in Ethiopia's export sector, accounting for a significant 79% of export revenue in 2023.

Figure 4.2: Contribution of the manufacturing sector to GDP and export (million US\$)



Source: Computed from data UNIDO (2010-2021)

Several factors have likely contributed to this downturn in the manufacturing sector's export performance:

- Internal challenges: Political instability and the resulting economic difficulties have hampered the sector's growth. Notably, the suspension of African Growth and Opportunity Act (AGOA) benefits has dealt a significant blow to Ethiopian exports.
- External shocks: Global challenges like the COVID-19 pandemic and the Russia-Ukraine war have disrupted the supply chains and negatively impacted global trade, further affecting Ethiopia's manufacturing sub-sector.

Ethiopia's export profile suggests a low economic complexity. This means its current exports are primary commodities, which may not guarantee sustained growth. The dominance of coffee, oil seeds, vegetables, dried legumes, and cut flowers in Ethiopia's 2021 export items highlights the dominance of Ethiopia's export basket with primary commodities. These products are typically less complex than the manufactured goods. Additionally, the capabilities needed to produce more complex goods are likely underdeveloped. Therefore, a strategic approach focusing on two key areas could benefit the country. First, building capabilities around existing exports, *i.e.* diversifying within the existing product space by exploring higher-value products related to current exports (e.g., processed coffee instead of raw beans). Second, attracting targeted foreign direct investment (FDI). That means prioritizing FDI that brings expertise and technology to develop capabilities for more complex products, considering both feasibility and economic benefit.

Table 4.5: Diversification into new products (2006-2021)

Country	New products	Per capita (US\$)	Total Value (million US\$) (2021)
Ethiopia	25	3	317
Uganda	20	2	102
Kenya	14	6	325
Yemen	11	5	178

Source: Computed from data in Harvard University (2021)

In terms of new product diversification, Ethiopia added 25 new products into her export baskets in between 2006 and 2021. However, the income contribution of these new products remains modest. In 2021, these products generated only \$3 per capita. This suggests a need to focus on increasing the export volume or value of these new products. Kenya, for example, achieved a higher per capita income (\$6) from just 14 new products added during the same period. This highlights the importance of not just introducing new products but also scaling them up for greater economic impact.

Table 4.6: New products exported, 2006-2021, by sectoral contribution and their complexity

Product	Share (%)	Complexity	Product	Share (%)	Complexity
Men's suit and underwear	17.67	-1.27	Women's undergarments, knit	4.95	-1.63
Babies' garment, knit	12.74	-1.59	Active wear	3.11	-1.12
Women's suit and underwear	9.87	-1.32	Brassieres	2.81	-1.22
Women's suit, knit	7.27	-1.33	Electrical ignition equipment	2.60	0.83
Men's shirts	6.71	-1.34	Vegetable dried	2.52	-1.22
T-shirts, knit	5.69	-1.28	Precious stones	2	-1.55
Sweaters, pullovers, sweatshirts, etc. knit	5.58	-1.4	Woven fabrics of synthetic filament yarn	1.86	-0.61
Beef	8.48	-0.56	Leather and apparel	1.09	-0.87

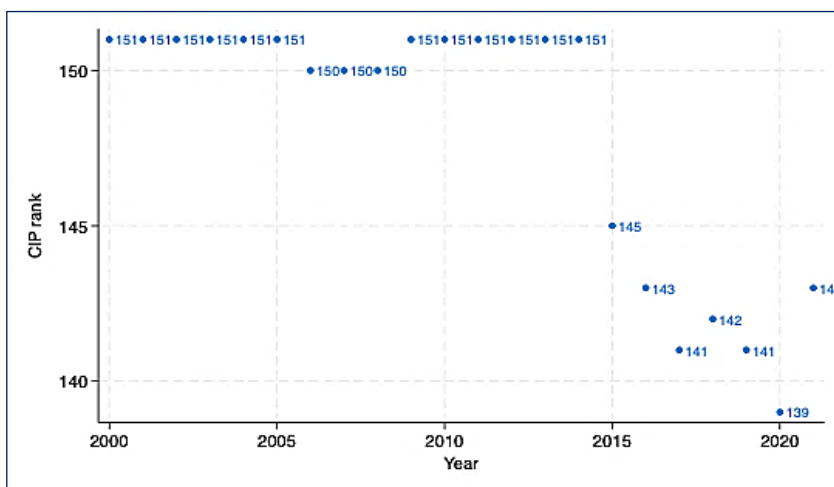
Source: Compiled from data in Harvard Growth Lab (2021)

4.6. Competitiveness of the Manufacturing sub-Sector

Industrial competitiveness is defined as the capacity of a country to increase its presence in the international and domestic market whilst developing industrial sectors and activities with higher value-added and

technological content (UNIDO, 2012). Industrial competitiveness necessitates innovation, technological sophistication, developed infrastructure and effective industrial policy directed at exploiting comparative advantage. According to UNIDO's Competitive Industrial Performance Index (CIP), which measures countries' capacity to produce and export manufactured goods competitively, Ethiopia is ranked 143rd out of 153 economies in 2021 (Figure 4.3). This indicates that the competitiveness of Ethiopia's manufacturing sector is weak.

Figure 4.3: Competitive industrial performance (CIP) rank of Ethiopia



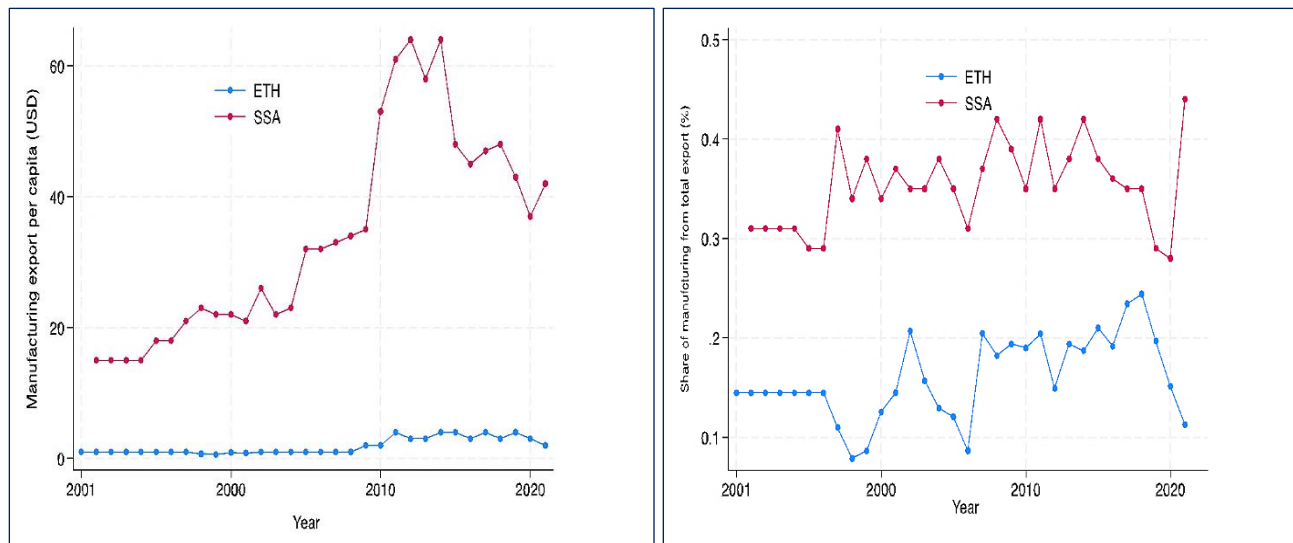
Source: Computed from data in UNIDO (2010-2021)

Ethiopia's manufacturing exports remain modest, averaging only \$2 per capita throughout the 2001-2021 period (Figure 4.4). The peak of \$4 per capita in 2019 highlights this limited growth. Compared to the sub-Saharan African (SSA) average, this is a particularly low figure. This suggests that critical efforts are needed to strengthen Ethiopia's manufacturing sub-sector relative to its population size. With a large

workforce, the country has the potential to be more competitive in the global market via exporting or manufactured goods. However, the current export performance indicates the lack of substantial manufacturing capabilities to fully exploit this potential.

Ethiopia's manufacturing sector contributes a lower share of the country's total exports compared to the SSA average. Historically, this share was below 20% and has dipped further in recent years, reaching around 10%. This recent decline is largely attributed to internal conflicts within the country and the loss of benefits under the AGOA.

Figure 4.4: Manufacturing export per capita and share of manufacturing export, 2001-2021

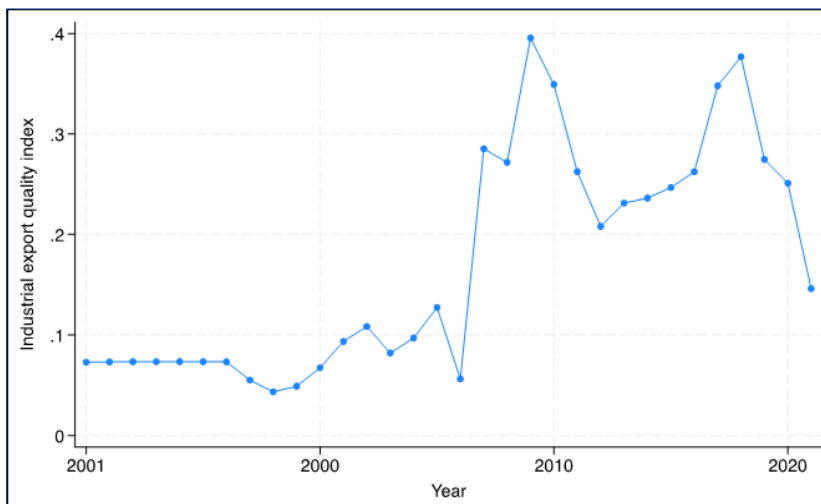


Source: Computed from data in UNIDO (2010-2021)

The UNIDO's Industrial Export Quality Index (IEQI)⁸ shows a complex picture of Ethiopia's performance in exporting high-quality manufactured goods (Figure 4.5). Early data, from 2001 to 2006, reveals a stagnant IEQI hovering around 0.1. This suggests that during this period, Ethiopia's industrial sector faced significant challenges in competing globally on quality and efficiency.

Things began to turn around between 2006 and 2009 with the IEQI saw a remarkable rise, reaching a high of 0.4 by 2009. This significant improvement indicates that Ethiopia made considerable strides in its ability to produce competitive manufactured goods. The share of manufacturing export from merchandise export reached maximum during this period with a record high of 22% in 2007 and starting declining after 2010 (WDI, 2023). Potential factors behind this success story could include investments in infrastructure, development of workforce skills, and a more supportive business environment. However, this positive trend seems to have reversed course. Since 2018, the IEQI has been on a concerning downward slope, dropping back to around 0.12 in 2021. This decline suggests that the earlier gains may be slipping away, with Ethiopia once again struggling to compete on quality in the international market. For instance, the export contribution of manufacturing to the merchandise export of the country has declined from 17% in 2019 to only 9% in 2023 (WDI, 2023).

⁸ UNIDO Industrial Export Quality Index (IEQI) measures a country's capability to produce high-quality manufactured goods that are competitive in international markets. It's a composite index, meaning it combines various indicators that reflect different aspects of export quality, rather than a simple ratio of value to quantity. The index is typically normalized to a scale of 0 to 1, with higher values indicating greater export quality.

Figure 4.5: Industrial export quality index

Source: Computed from data in UNIDO (2010-2021)

4.7. Manufacturing Inputs

Ethiopian manufacturing industries heavily rely on imported inputs while their earnings from export are much less than the expenses for purchasing the inputs from abroad. According to the recent LMMIS 2020 survey of ESS, Ethiopian manufacturing industries suffer from a substantial trade deficit. While the sector generates an annual export revenue of around 8 billion Ethiopian Birr (ETB), the cost of importing raw materials is a staggering 41 billion ETB. This means that for every Birr earned from exports, the sector spends 4.12 Birr on imported inputs.

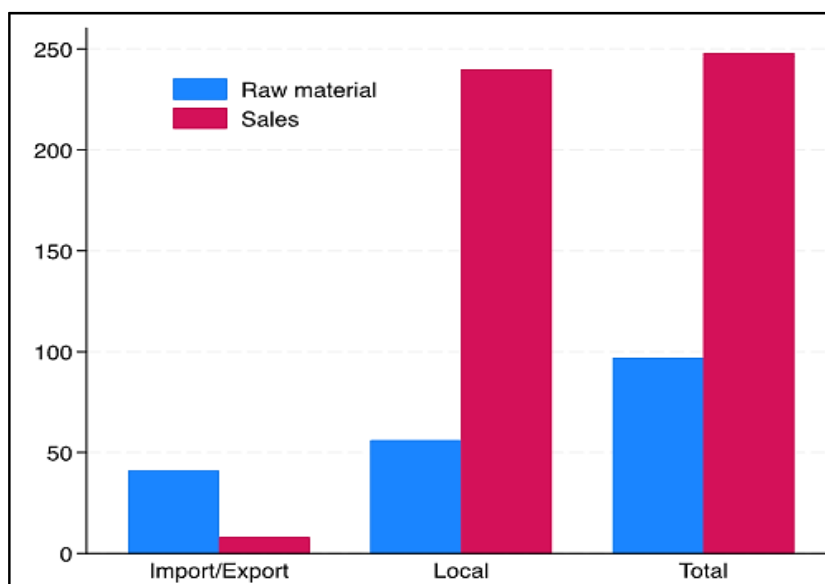
This significant discrepancy highlights a key challenge for Ethiopian manufacturers. Here are some possible reasons behind this imbalance:

- Reliance on imported raw materials: Ethiopia lacks the domestic resources or production capacity to supply the inputs

needed by the manufacturers. This can force them to rely on foreign suppliers, which could mainly inflate costs.

- **Limited domestic value addition:** In some cases, manufacturers import semi-finished goods rather than raw materials. While this can streamline production, it also reduces the value added domestically and limits potential export earnings.
- **Lack of competitiveness in finished goods:** Ethiopian exports face stiff competition in the global market, leading to lower prices and reduced earnings.

Figure 4.6: Input requirement of Ethiopian Manufacturing Industries



Source: Computed from data in ESS (2020)

Table 4.7 sheds light on the Ethiopian manufacturing sector's dependence on imported raw materials by industrial groups. The top three manufacturing groups that heavily rely on imported raw materials

are plastic products, structural metal products and soap, detergents and cleaning products producers.

- Manufacture of plastic products: This industry leads with consuming 12.67% (5.23 billion Birr) of the total imported raw materials. This significant reliance on external sources suggests a need to explore possibilities for strengthening domestic plastic production capabilities.
- Manufacture of structural metal products: This sector, encompassing products like doors, frames, and metal frameworks, accounts for 12.2% (5.03 billion Birr) of all imported raw materials. This highlights a potential gap in the availability of domestically produced metals suitable for structural applications.
- Manufacture of soap, detergents, and cleaning products: This industry group, including toiletries and perfumes, consumes 5.86% (2.42 billion Birr) of imported raw materials. Further investigation is needed to identify the specific raw materials being imported in this sector to explore potential for local substitutes or increased domestic production.

These top three industries alone account for nearly 30% of the total expenditure on imported raw materials, exposing the sector to vulnerabilities like fluctuations in global prices and supply chains.

Table 4.7: Share of imported raw materials for top ten manufacturing groups (billions of ETB, 2020)

Industrial group	Local	Imported	Total	Share of import (%)
Manufacture of plastic products	3.77	5.23	9	58%
Manufacture of structural metal products	1.25	5.03	6.28	80%
Soap and Detergents	1.98	2.42	4.4	55%
Basic iron and steel	1.68	2.21	3.89	57%
Fabricated metal product	0.05	1.93	1.98	97%
Bodies for motor vehicles and trailers	0.32	1.76	2.08	85%
Paints and Varnishes	0.31	1.74	2.05	85%
Soft drinks and mineral water	1.16	1.72	2.88	60%
Wearing apparel, except fur	1.57	1.56	3.13	50%
Grain mill products	10.54	1.37	11.91	12%
others	34.08	16.29	50.37	32%

Source: Computed from data in ESS (2020)

However, the table also reveals encouraging examples of successful utilization of domestic resources:

- **Grain mill products:** This industry stands out as a shining example, utilizing over 88% local raw materials. This strong link between Ethiopia's agricultural sector and grain milling demonstrates the effectiveness of leveraging domestic

resources to create a robust manufacturing industry. It highlights the potential for similar linkages to be developed between other agricultural outputs and related manufacturing sub-sectors.

- **Wearing apparel:** This industry, excluding fur products, showcases a commendable level of local sourcing, with around 50% of its raw material needs met domestically. This suggests a potentially well-established local supply chain for textiles and fabrics within Ethiopia. Further development and support for this sector could encourage even greater reliance on domestic resources, promoting job creation and economic growth within the country.

These examples highlight the potential for Ethiopia's manufacturing sector to become more self-sufficient and less vulnerable to external factors if it is going to use domestic inputs. By strategically addressing import dependencies, Ethiopia can achieve a more robust and resilient manufacturing base. This could involve investing in domestic supply of key raw materials, encouraging the development of substitute materials that can be sourced locally, and fostering linkages between the agricultural sector and industries that rely on agricultural inputs.

Ethiopia's manufacturing sub-sector appears to be primarily focused on the domestic market (Table 4.8). Data from the 2020 LMIS survey highlights this, except for processing and preserving of the meat industry. This sector stands out as the leading exporter, contributing a substantial 23.29% (1.88 billion ETB) to the total export earnings of the country. The tanning and dressing of leather industries are the other industries with a notable export orientation, accounting for 37% of its sales from export.

Table 4.8: Exports earnings of the top ten manufacturing industries, by industry group

Industrial group	Local	Export	Total	Share of export (%)
Processing and preserving of meat	0.99	1.88	2.87	65.5%
Manufacture of other food products	8.65	1.79	10.44	17.1%
Manufacture of vegetable and animal oils and fats	3.2	0.86	4.06	21.2%
Manufacture of wearing apparel, except fur apparel	7.32	0.55	7.87	7.0%
Manufacture of made-up textile articles; except apparel	2.02	0.51	2.53	20.2%
Manufacture of plastic products	15.46	0.5	15.96	3.1%
Manufacture of footwear	2.49	0.34	2.83	12.0%
Finishing of textile	2.9	0.33	3.23	10.2%
Tanning and dressing of leather; dressing and dyeing of fur	0.51	0.3	0.81	37.0%
Manufacture of bakery product	9.48	0.16	9.64	1.7%
Others	187.54	0.87	188.41	0.5%

Source: Computed from data in ESS (2020)

4.8. Industrial Parks

Inspired by the economic success of East Asian nations, Ethiopia launched an ambitious industrial park program in the mid-2010s. These parks were envisioned as hubs for investment, trade, and job creation, ultimately attracting foreign direct investment (FDI) and boosting foreign exchange earnings of the country. With aspirations to build over

30 parks, Ethiopia currently has 13 operational ones, primarily government owned. Majority of the IPs focus on the textile and garment subsectors (Table 4.9).

Table 4.9: Structure of industrial parks in Ethiopia

IP Name	Sector	Number of Shades	Remark
Bole Lemi I	Textile and garment	20	Fully operational
Bole Lemi II	Textile and garment	2	Fully operational
Hawassa	Textile and garment	52	Operational but at low capacity due to AGOA
Kombolcha	Textile and garment	9	Damaged by conflict, resumed operation
Mekelle	Textile and garment	15	Damaged by conflict, resumed operation recently
Adama	Textile and garment	19	Operational
Dire Dawa	Textile and garment	15	Operational
Debre Birhan	Textile and garment	9	Partially Operational
Jimma	Textile and garment	9	Operational
Bahir Dar	Textile and garment	8	Not operational (AGOA and recent conflict)
Semere	Multisector	8	Not operational
Addis IP	Textile, garment & leather products	8	
ICT Park	ICT	6	Not operational
Kilinto IP	Pharmaceutical	-	Fully operational

Source: Compiled from data in IPDC (2023)

The IP strategy of Ethiopia has shown promising performance in the beginning through successfully attracting substantial FDI, exceeding US\$ 740 million from over 60 foreign investors. Additionally, it has created over 150,000 jobs, particularly benefiting women. Manufactured exports have also grown, reaching \$575 million in 2023, with several parks achieving high occupancy rates (UNDP, 2023).

However, the impact on the broader economy remains limited. While manufactured exports are on the rise, they still represent less than one-fifth of Ethiopia's total exports in 2023. This suggests that the parks have yet to fully unlock their potential to significantly boost overall export volumes. While the initial goals of the strategy have been met with some success, there's a clear opportunity to leverage the industrial parks to a greater extent.

4.8.1. Job creation by industrial parks

Table 4.10 reveals a concerning trend of declining job creation by industrial parks of the country. While a total of 55,827 jobs created in 2021, this number slightly dropped to 55,266 in 2022 and further declined to 45,479 in 2023. This represents a significant decrease of over 10,000 jobs between 2021 and 2023. Some parks, like Debre Berhan and Adama, did manage to show a positive trend in job creation throughout the period. However, the overall decline is a cause for concern regarding national level job creation potential of the industrial parks.

The IPDC (2024) report shows that several domestic and international factors are contributing to the decline in new job creation within the industrial parks. The major ones are:

- Covid-19 and suspension of AGOA benefits: Covid-19 and Ethiopia's suspension from the AGOA forced some firms in the IPs to leave.

- **Slow onboarding of new companies:** While new companies have signed contracts to operate within the parks, the hiring and production ramp-up process takes time. This delay in new job creation contributes to the current shortfall.
- **Wage pressures and worker satisfaction:** Stagnant wages, failing to keep pace with rising living costs, are leading to worker dissatisfaction and higher turnover.
- **Labor turnover:** Several parks are experiencing high absenteeism and employee turnover, likely linked to low wages. Addressing this issue will be crucial for maintaining productivity.
- **Limited domestic integration:** While the parks have successfully connected with global textile value chains, fostering stronger linkages with domestic small and medium-sized enterprises (SMEs) remains a challenge. This limits the broader economic impact of the parks.
- **Security concerns:** The deteriorating security situation in Amhara and Oromia regions poses a significant risk to the smooth operation of the parks. While there are signs of improvement in Tigray, continued efforts are needed to ensure a stable environment for investment and production.

In addition to these factors, several issues have impacted job creation potential of Ethiopia's industrial parks. Concerns have been raised about a potential bias against domestic companies operating within the industrial parks. This perception stems from two factors. First, there seems to be a lack of clear and attractive incentive packages specifically designed to encourage domestic firms to participate in the industrial parks. Second, a prevailing emphasis on attracting foreign direct investment (FDI) and generating foreign currency may be unintentionally creating a less welcoming environment for domestic companies.

Table 4.10: Number of jobs created by industrial parks

Industrial park	2021	2022	2023
Hawassa	25,058	18,596	12,903
Bole Lemi	15,037	18,702	14,983
Kombolcha	3,450	2,143	1,755
Mekele	1,676	-	-
Adama	6,112	8,513	8,365
Bahir Dar	1,202	230	-
Jimma	370	240	327
Dire Dawa	1,002	3,263	2,298
Debre Berhan	868	2,364	3,568
Addis IP	837	1,215	1,138
Kilinto	215	-	142
Total	55,827	55,266	45,479

Source: Compiled from data in IPDC (2024)

4.8.2. Export performance

Table 4.11 showcases the export earnings (in USD) of Ethiopian industrial parks from 2021 to 2023. Overall, there's a slight decline in total export earnings from 2021 (USD 181.7 million) to 2023 (USD 149.7 million). Bole Lemi IP has shown consistent growth throughout the period, reaching a high of USD 65.4 million in 2023, while Hawassa initially strong earner (USD 95.1 million in 2021) but faced a significant drop in 2023 (USD 54.3 million), likely due to the AGOA (mentioned earlier). Debre Birhan is an emerging IP with a steady increase in earnings which reached USD 3.7 million in 2023. The overall decline in export earnings from 2021 to 2023 could be attributed to factors like loss of AGOA benefits (with a significant impact on IP in Hawassa).

Table 4.11: Export performance of Ethiopia's IPs (Millions of USD)

Industrial park	2021	2022	2023
Bole Lemi	44	51	65
Hawassa	95	91	54
Kombolcha	7	10	4
Mekelle	5	-	-
Adama	8	16	14
Dire Dawa	3	5	4
Debre Berhan	2	2	4
Jimma	-	2	1
Bahir Dar	-	1	-
Kilinto	-	-	-
Addis IP	2	2	3
ICT Park	16	-	-
Total	182	179	150

Source: Compiled from data in IPDC (2024)

4.9. Constraints Facing the Manufacturing Sector

Ethiopia's manufacturing sub-sector struggles under a complex web of limitations that hinder its growth and competitiveness. This section presents the critical challenges in the manufacturing sub-sector.

Crippling raw material shortage: The most critical bottleneck for Ethiopian manufacturers is the shortage of raw materials. This problem has become increasingly severe, as evidenced by the sharp rise in the number of firms reporting it as a major challenge. In 2018, only 28% of firms identified this as a key constraint, but by 2020, that figure had skyrocketed to 46%. This shortage significantly limits production capacity and disrupts operations, ultimately hindering sectoral growth.

Unreliable utility supply: Fluctuations or outages in essential utilities like electricity and water can have a devastating impact on the performance of industries. In 2018, around 24% of firms reported unreliable electricity and water supply as a significant constraint. While there have been improvements, with the figure dropping to 7% in 2020, however, the problem remains a concern. Power outages can disrupt production schedules, damage equipment, and compromise product quality. These could lead to inefficiencies and higher production costs, further hindering the sector's competitiveness in the international market.

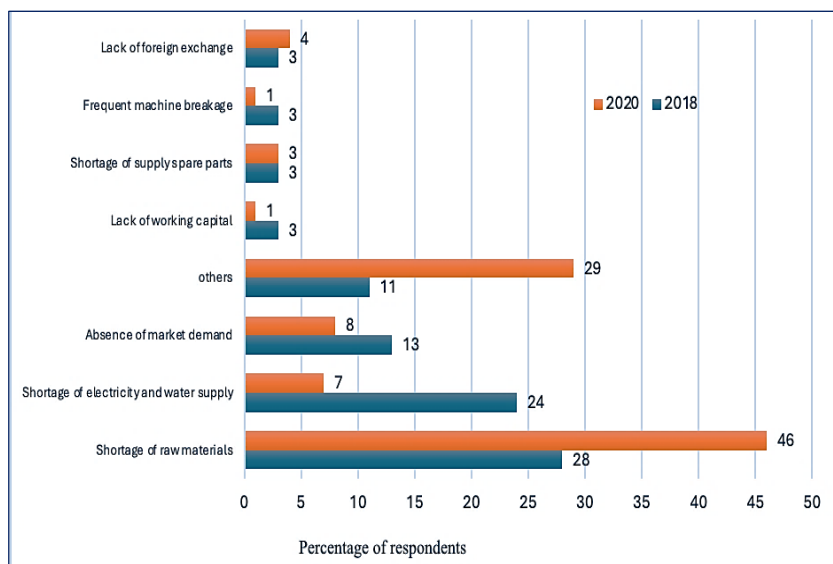
Limited market access: While the issue of market access seems to be improving slightly, with the number of firms reporting a lack of market for their products dropping from 13% in 2018 to 8% in 2020, there is deeper concern with regards to a single unified domestic market. Ethiopia risks turning its large potential domestic market into a disadvantage. The country is fragmenting into multiple regional markets, each with potentially different tax structures, subsidy programs, and licensing requirements. This creates uncertainty and complexity for businesses operating across regions (UNDP, 2023).

Furthermore, compounding the market access challenge is the presence of internal barriers to the free movement of labor and capital throughout Ethiopia. The poorly secured environment in some areas and differing policy regimes across regions create obstacles for businesses seeking to expand their operations or source resources from different parts of the country.

While the federal government has the authority to license and manage foreign investment, crucial inputs like land are controlled by regional states. This can lead to situations where states hesitate to provide land to federally approved investors. This lack of streamlined coordination between the federal and regional authorities creates additional hurdles for businesses. These issues highlight the need for a more unified

domestic market in Ethiopia. Addressing regional market fragmentation, removing internal barriers to movement, and fostering better federal-state coordination would create a more conducive environment for business growth and allow Ethiopia to fully capitalize on its domestic market potential.

Figure 4.7: Constraints Facing Manufacturing Sector



Source: Computed from data in ESS (2018, 2020)

Ethiopia's manufacturing sector faces more than just operational hurdles like raw material supply shortages. The UNDP (2023) report highlighted critical macroeconomic challenges. These include a lack of foreign currency (forex), a significant gap between official and black-market exchange rates, and limited access to land.

Further challenges include unreliable access to essential inputs beyond raw materials, and limited access to finance. Banks are reluctant to lend to the manufacturing enterprise due to the perceived higher risk of

defaults and the short-term nature of their deposits, making long-term investment difficult.

4.10. Concluding Remarks

Ethiopia's manufacturing sub-sector holds immense promise for driving economic growth and creating jobs. However, this potential remains largely untapped due to numerous challenges. While recent government policies prioritize industrial development, significant hurdles need to be overcome for this sector to truly contribute to the nation's economic transformation.

The sector's contribution to GDP has decreased, highlighting its susceptibility to external shocks. Job creation also falls short of expectations, with recent disruptions forcing companies to close their businesses. Additionally, Ethiopia relies heavily on imported merchandise for manufactured goods, while its own export performance remains weak. This not only restricts foreign currency earnings but also hinders the sector's ability to compete globally.

The dominance of small and micro-enterprises within the sub-sector presents another challenge. These businesses struggle with economies of scale, hindering overall productivity enhancement. Beyond these structural limitations, the sector faces operational hurdles as well. Shortages of raw materials and unreliable access to basic utilities like electricity and water create bottlenecks in production and disrupt operations. This ultimately limits capacity utilization and raises production costs, making Ethiopian manufacturers less competitive in the international market.

The lack of readily available foreign currency (forex) restricts the import of essential materials and equipment. Furthermore, the significant gap between the official bank rate and the black-market rate for forex introduces uncertainty and discourages investment. Manufacturers struggle to plan effectively in such an unstable environment.

The absence of a unified domestic market with consistent regulations across regions creates difficulties for businesses seeking to expand their reach. Limited access to suitable industrial land further hinders the establishment and growth of new manufacturers. Finally, banks perceive the manufacturing sector as having a higher risk of default compared to other sectors. This, combined with the short-term nature of bank deposits, discourages lending to manufacturing ventures, limiting access to much-needed capital.

Unlocking the full potential of Ethiopia's manufacturing sub-sector requires a multi-pronged approach. This includes:

- **Boosting domestic production:** Investments in infrastructure, raw material supply chains, and import substitution policies can encourage domestic production and reduce import dependence.
- **Enhancing export competitiveness:** Streamlining export processes, attracting foreign direct investment, and fostering technological advancements can boost export performance.
- **Supporting business growth:** Programs that encourage partnerships, improve access to finance, and enhance workforce skills can empower existing firms and attract new entrants.
- **Focusing on regional integration:** Leveraging regional trade agreements and fostering cross-border collaboration can expand market access for Ethiopian manufacturers.
- **To ensure a fair and balanced ecosystem within the industrial parks, it's recommended to:**
 - **Develop domestic investment incentives:** Create targeted incentive packages that address the specific needs and challenges faced by domestic firms looking to operate within the parks.
 - **Shift towards a more inclusive approach:** Balance the focus on FDI with efforts to nurture and empower domestic companies. This will foster a more robust and diversified industrial base.

References

- Amsden, A. H. (2001). *The rise of "the rest": challenges to the west from late-industrializing economies*, Oxford University Press, USA.
- Ethiopian Statistical Services (EES) (2018). Medium and Large scale manufacturing industry survey
- _____. (2020). Medium and Large scale manufacturing industry survey.
- FDRE National Plan Commission. (2016). Growth and Transformation Plan II (GTP II) (2015/16 2019/20).
- Industrial Park Development Corporation (IPDC). (2023). Industrial parks operation sector performance of the 2022/23 fiscal year report.
- International Labor Organization (ILO). (2022). Youth employment opportunities in the digital economy in Ethiopia: Afar and Somali regions
- McMillan, M., Rodrik, D., Bacchetta, M., & Jensen, M. (2011). Making globalization socially sustainable. ed. Marc Bacchetta and Marion Jansen, Chapter Globalization, Structural Change, and Productivity Growth. Geneva: International Labour Organization and World Trade Organization.
- National Bank of Ethiopia. (NBE, 2022). Annual Report 2021/22.
- Oqubay, A. (2015). *Made in Africa: Industrial Policy in Ethiopia* (p. 374). Oxford University Press.
- Harvard University. (2021). [The Atlas of Economic Complexity \(harvard.edu\)](https://atlas.harvard.edu/), accessed online on April 17, 2024
- UNDP. (2023). Quarterly Economic Profile of Ethiopia.
- _____. (2023a). Can Ethiopia become a manufacturing powerhouse? Working Paper Series No.4
- United Nations Industrial Development Organization. (UNIDO). (2021). Manufacturing and Trade database, accessed online from, [Home | UNIDO Statistics Portal](https://home.unido.org/statistics), on March 20, 2024.
- World Bank. (2023). World Development Indicators, accessed online from [World Development Indicators | Data Bank \(worldbank.org\)](https://data.worldbank.org/), on February 15, 2024.

5. PERFORMANCE OF THE EXTERNAL SECTOR

5.1. Introduction

Countries are generally expected to benefit from international trade in terms of increasing international competitiveness, enhancing productivity and efficiency, achieving economies of scale, attracting FDI, and accessing knowledge and technology. Export performance is not only the result of producing goods in high demand but also the outcome of the various elements that frame the production environment and access to international markets (UNCTAD, 2005). Both demand and supply-side factors determine export performance. Depending on the stage of development of the external sector, the relative importance of demand and supply factors varies across countries. Consequently, policies should be differentiated according to determinants of export capacities that vary across countries. Trade barriers, competitive supply capacity, strength of linkages to international markets, physical infrastructures, soundness of the macroeconomic framework, diversity and uniqueness of products, and quality of institutions are the major determinants of export performance. Supply capacity is mainly determined by domestic transport infrastructure, macroeconomic environment, FDI, and institutions.

The performance of Ethiopia's external sector is characterized by exports of agricultural commodities and imports of manufactured goods. Huge fluctuation and very low product diversification, high export and import market concentration, huge and increasing BoP deficit, instability of foreign export earnings, and high trade barriers are salient features of the external sector. These factors have several adverse effects on the Ethiopian economy, including very low and deteriorating foreign reserves, increasingly depreciating value of the local currency, loss of international competitiveness, deteriorating FDI,

and failure to satisfy the demand for imports and inflated prices of imported goods and services.

This chapter rigorously investigates the dynamics of the BoP, international trade performance, trade diversification and market concentration, the economic and product complexity of exports, exchange rate, globalization and their dynamic link over the last two and half decades. Global experiences in the external trade performance are also benchmarked to draw lessons for Ethiopia.

5.2. Methodology

5.2.1. *Data and methods*

To investigate the performance of the external sector in Ethiopia, secondary data from national and international sources were utilized. The following official sources of data were utilized for the period 2001-2022:

- National Bank of Ethiopia (NBE)
- United Nations Trade and Development (UNCTAD)
- The World Bank
- World Trade Organization (WTO)
- Harvard Growth Lab (HGL)
- Koff Swiss Economic Institute (KSEI)
- Global Edge
- World Integrated Trade Solutions (WITS)

Data were analyzed using nonparametric methods including pairwise correlations, timeseries line plots, and scatter plots.

5.2.2. *Definition of variables*

Balance of Payments (BoP): The BoP is a statistical statement that summarizes transactions between residents and nonresidents of a country during a period. The BoP is the sum of current account, capital account, financial account, and the balancing item which adds up to zero.

Trade (% of GDP): Trade is the sum of exports and imports of goods and services measured as a share of gross domestic product.

Economic Complexity Index (ECI): The ECI expresses the diversity and sophistication of the productive capabilities embedded in the exports of a country (HGL 2021). The ECI measures the knowledge intensity of an economy by considering the diversity and ubiquity of its exports. It is a ranking of countries based on the diversity and complexity of their export basket. High complexity countries have a range of sophisticated, specialized capabilities and can produce a highly diversified set of complex products. Countries with ECI below zero have less complex economy and lower rankings, whereas countries with ECI greater zero have more complex economy and higher rankings.

Complexity Outlook Index (COI): The COI, reported by HGL, is a measure of a country's potential for diversifying into complex products based on its current capabilities. IT shows the ease of diversification, with a high COI signifying many nearby complex products linked to current know-how. It captures the connectedness of an economy's existing capabilities for diversification.

Product Complexity Index (PCI): The PCI, reported by HGL, captures the amount and sophistication of know-how required to produce a product. It is a ranking of the diversity and sophistication of the productive know-how required to produce a product. PCI is calculated based on how many other countries can produce the product and the economic complexity of those countries.

Export Market Concentration Index (EMCI): The EMCI measures, for each product, the degree of export market concentration by country of origin (UNCTAD, 2024). It tells if a large share of commodity exports is accounted for by a small number of countries or, on the contrary, if exports are well distributed among many countries.

Import Market Concentration Index (IMCI): The IMCI measures, for each product, the degree of import market concentration by country of destination (UNCTAD, 2024). It tells if a large share of commodity imports is bought by a small number of countries or, on the contrary, if the imports are well distributed among many countries.

Export Product Concentration Index (EPCI): The EPI measures, for each country, the degree of concentration of goods exported (it does not include services) (UNCTAD, 2024). It tells if a large share of a country's exports is accounted for by a small number of commodities or, on the contrary, if its exports are well distributed among many products.

Import Product Concentration Index (IPCI): The IPCI measures, for each country, the degree of concentration of imports of goods (UNCTAD, 2024). It tells if a large share of a country's imports relies on a small number of commodities or, conversely, if imports are well distributed among many types of products.

Product Diversification Index (PDI): The PDI measures to what extent the structure of exports or imports by product of a given economy or group of economies differs from the world pattern (UNCTAD, 2024).

Globalization Index (GI): The GI measures the economic, social and political dimensions of globalization (KSEI, 2021). Economic globalization (scale of 1 to 100) covers both trade flows as well as financial flows. De facto trade is determined with reference to the trade in goods and services. De jure trade covers customs duties, taxes and restrictions on trade.

Economic Globalization: Economic globalization measures the extent to which countries are interconnected in terms of trade (goods, services, partner diversity) and finance including FDI, portfolio investment, international debt, international reserves, and international income.

Social Globalization: Social globalization comprises the extent of connection in terms of interpersonal, informational, and cultural globalization.

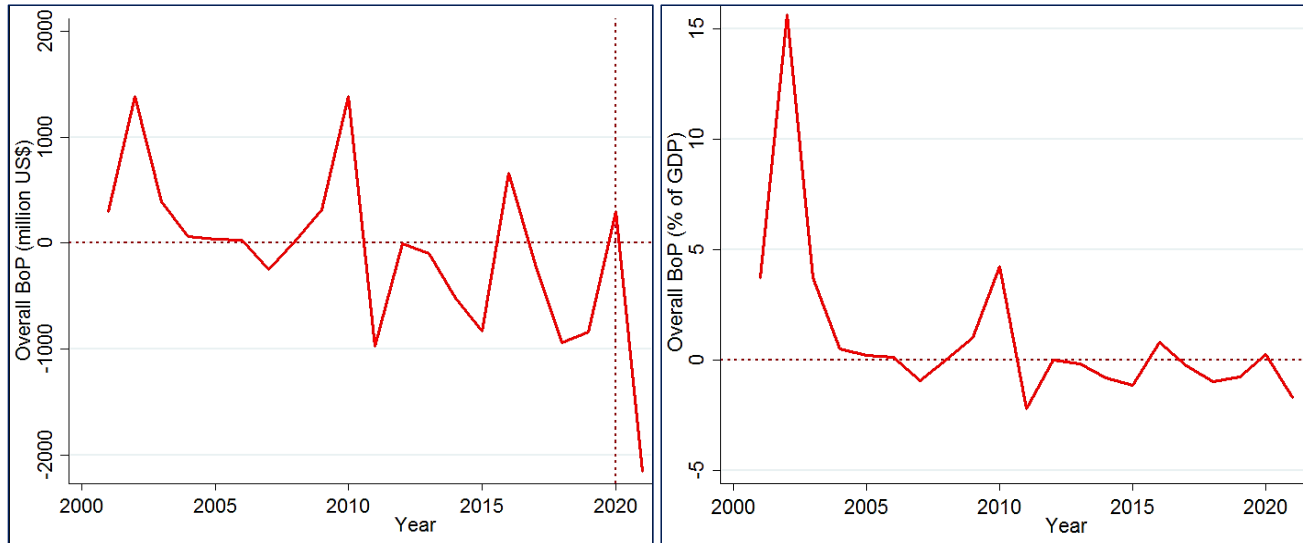
Political Globalization: Political globalization measures the extent to which countries are politically interconnected. Variables used to capture political globalization include number of embassies in the country, participation in the UN peacekeeping missions, and availability of international NGOs.

5.3. Balance of Payments

The international transactions of a country are mainly monitored by the balance of payments (BoP). The BoP is also used to assess the export growth potential and to formulate prudent and sustainable fiscal and trade policies and strategies.

The BoP deficit for Ethiopia has been persistently increasing for decades (Figure 5.1). Despite the attempts to reduce the BoP deficit in some planning periods, the longrun dynamics generally show persistent and widening BoP deficit in the last decade. It can be argued that the current adverse BoP for Ethiopia is mainly attributable to frequent regime changes resulting in inconsistent fiscal and trade policies that erode investment confidence for FDI, high inflation, domestic conflicts and political violence, and global structural changes affecting the real international economic position of the country and the relatively overvalued local currency and heavy dependence on imports.

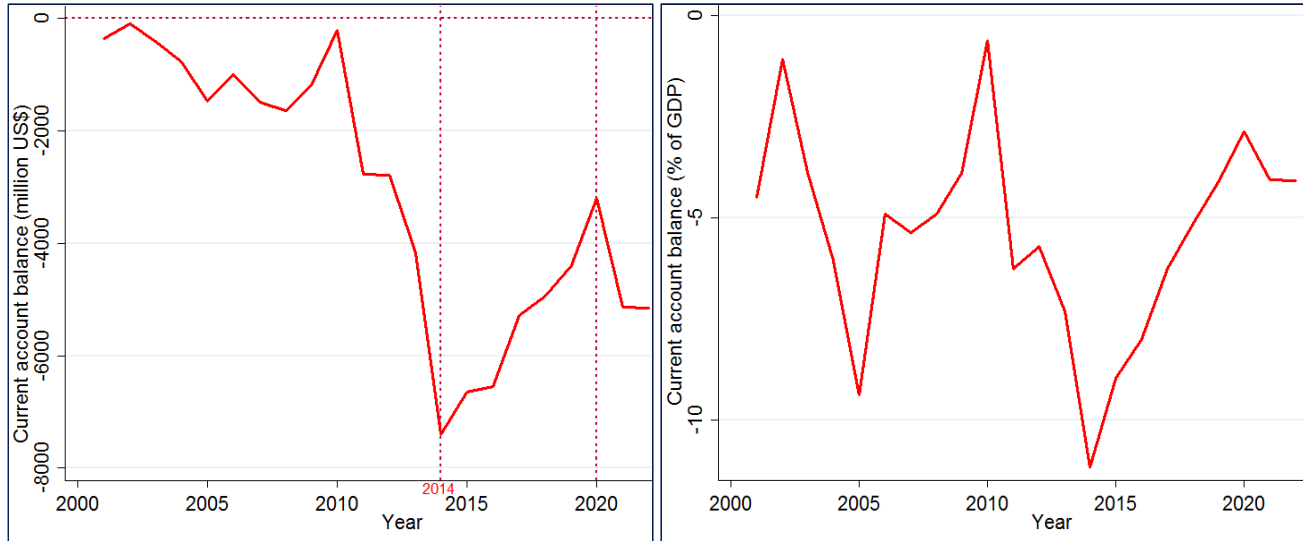
Figure 5.1: Overall balance of payments deficit increasing for Ethiopia



Source: Computed from data in the NBE (2001-2022)

The current account balance, reflecting the country's international transactions with the rest of the world, for Ethiopia was persistently negative over the last 22 years (Figure 5.2). Despite the slight improvement in reducing the deficit between 2014 and 2020, the current deficit remains to be a major challenge of the external sector for Ethiopia. After 2020, the deficit has been increasing due to the challenges related to the widespread domestic conflicts, political instabilities, external pressures, and the associated pressures on international transactions.

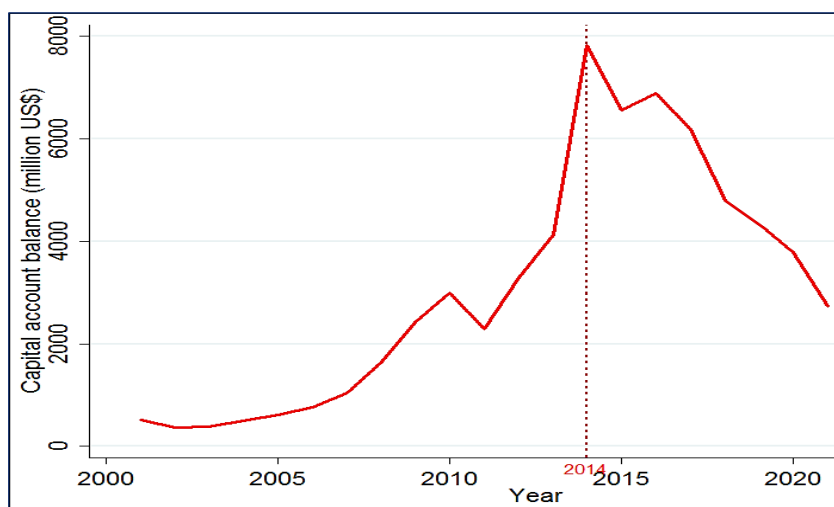
Figure 5.2: Current account deficit increasing for Ethiopia



Source: Computed from data in the NBE (2001-2022)

The capital account, that records the net change of assets and liabilities, has shown rapid improvements until the start of the GTPII (2014) (Figure 5.3). FDI and loans are the major components of capital accounts in Ethiopia. The surplus in the capital account reflects the increased loans and the net inflow of FDI to Ethiopia. Surplus capital account balance was rapidly increasing until it started to consistently fall after 2014.

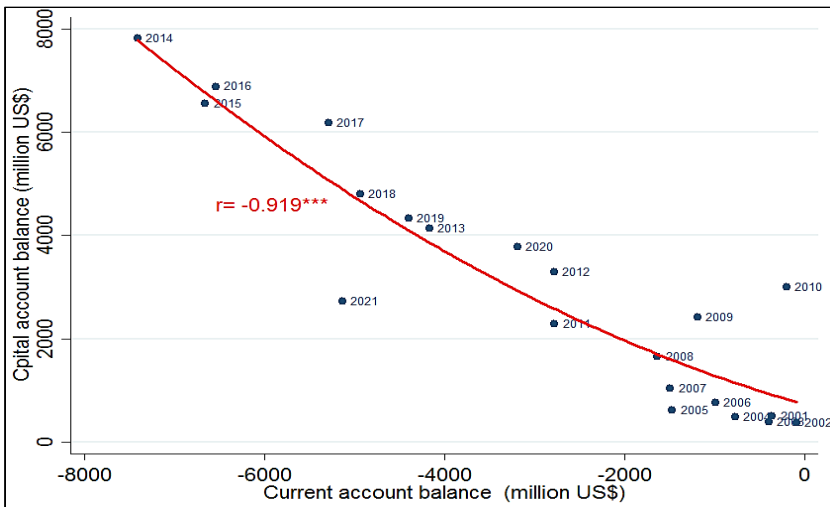
Figure 5.3: Capital account balance falling since 2014



Source: Computed from data in the NBE (2001-2022)

The dynamic link between current and capital accounts reveals their strong negative association (Figure 5.4). Surplus in the capital account was realized with the rising deficit in the current account balance. This rise in capital accounts is the result of external debt during the GTPII period. The rising deficit in the current account balance has forced the government to focus on external debt and cover expenditures for public investments and other costs.

Figure 5.4: Current account and capital account inversely associated in Ethiopia



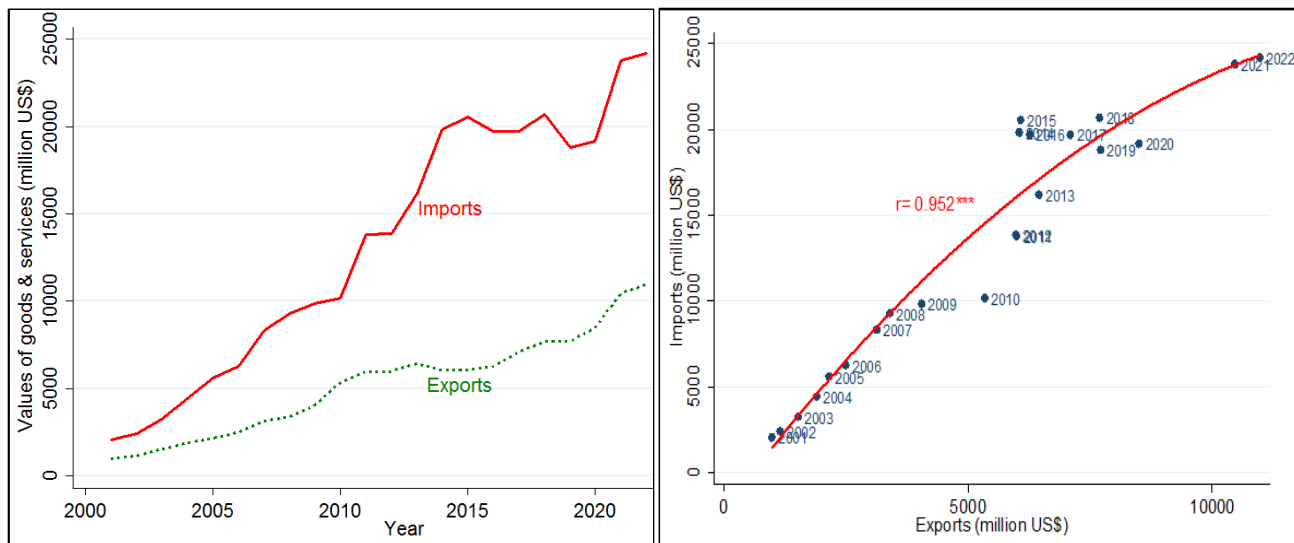
Source: Computed from data in the NBE (2001-2022)

5.4. Trade Performance

The value of exports and imports has been increasing over the years (left panel of Figure 5.5). Imports increased from US\$ 2.1 billion in 2001 to US\$ 24.2 billion (18.3% of GDP) in 2022/23. Exports increased from about US\$ 1 billion in 2001 to US\$ 11 billion (8.2% of GDP) in 2022/23. Despite the rise in both imports and exports, the gap between them is increasing, leading to a widening trade deficit. Imports are growing more rapidly than exports.

As expected, the dynamic link between exports and imports shows strong complementarity between them (right panel of the figure). The country's demand for imports was strongly determined by the export earnings. The mismatch between export and import demand has substantially contributed to the increasing deficit in the balance of payments.

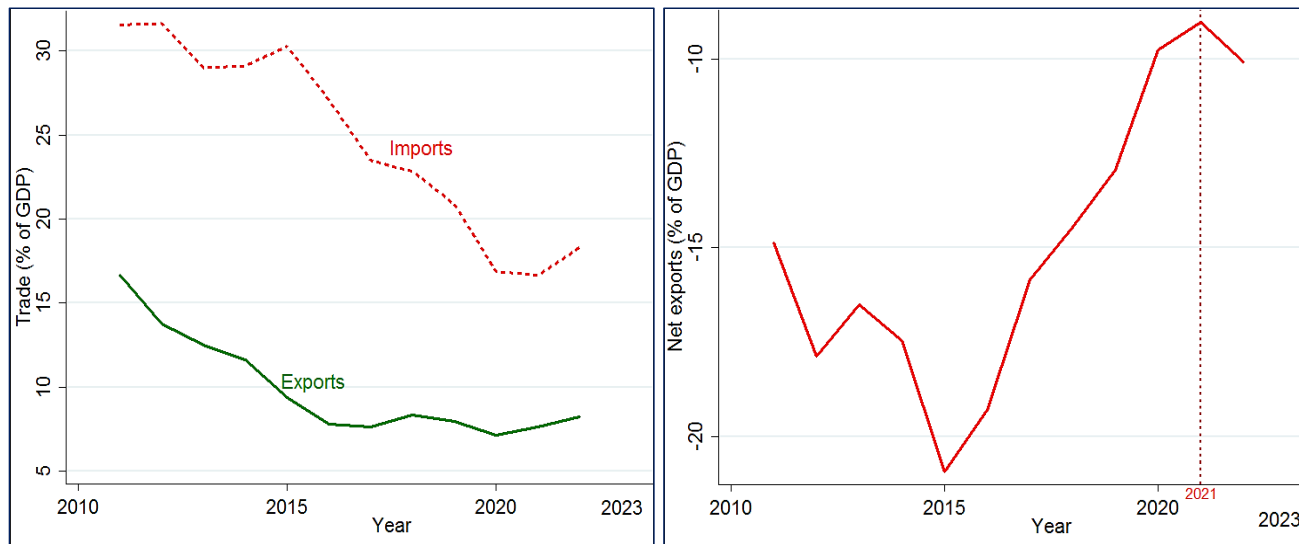
Figure 5.5: The dynamics link between export and import values for Ethiopia



Source: Computed from data in the NBE (2001-2022)

Compared to the size of the economy, Ethiopia's external trade performance, measured by growth of exports and imports, shows overall contraction in the last decade (Figure 5.6). The GDP shares of both imports and exports were consistently contracting until 2020 (left panel of the figure). The downward trend for imports and exports shows little improvement in net exports but a rapid fall of net exports since 2021 (right panel of the figure).

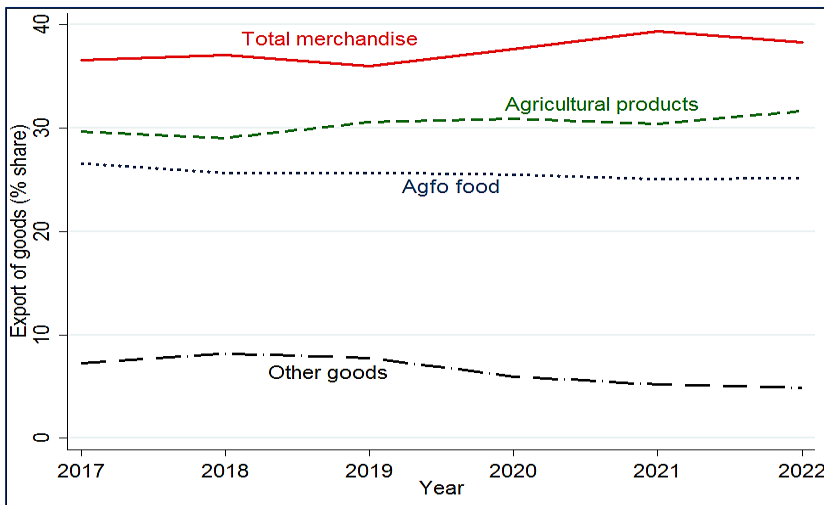
Figure 5.6: External trade contracting over the last decade



Source: Computed from data in the NBE (2011-2022)

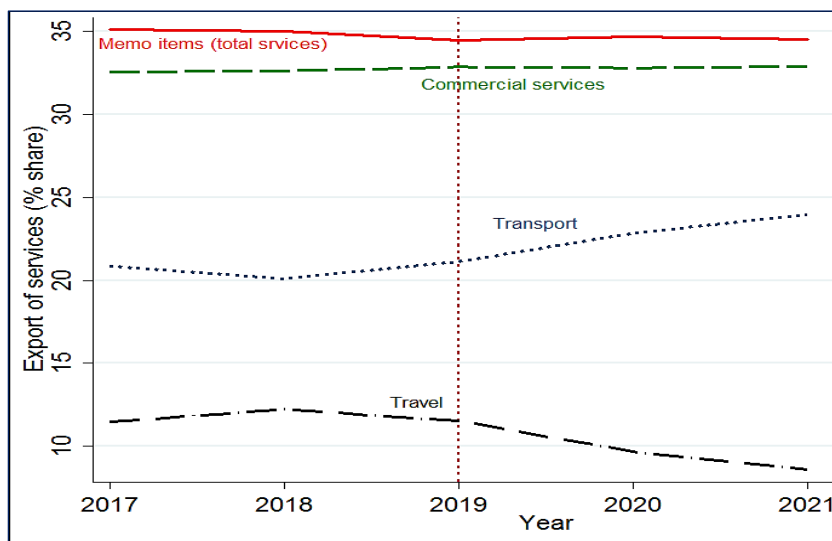
GDP share of merchandise exports dominates Ethiopia's goods exports followed by agricultural products (over 30%), agroforestry food, and other goods (Figure 5.7). Except for the slight improvement in the export of agricultural products, the export of other items has been contracting or nearly unchanged over the years.

Figure 5.7: Dynamics of goods export shares for Ethiopia



Source: Computed from data in the WTO (2017-2022)

The GDP share of service exports, on the other hand, is dominated by total services followed by commercial services, transport, and travel (Figure 5.8). Except for transport services, the GDP shares of other service exports were generally contracting since 2019. The overall contraction of external trade (as a % of GDP) shows the deteriorating trade openness in Ethiopia.

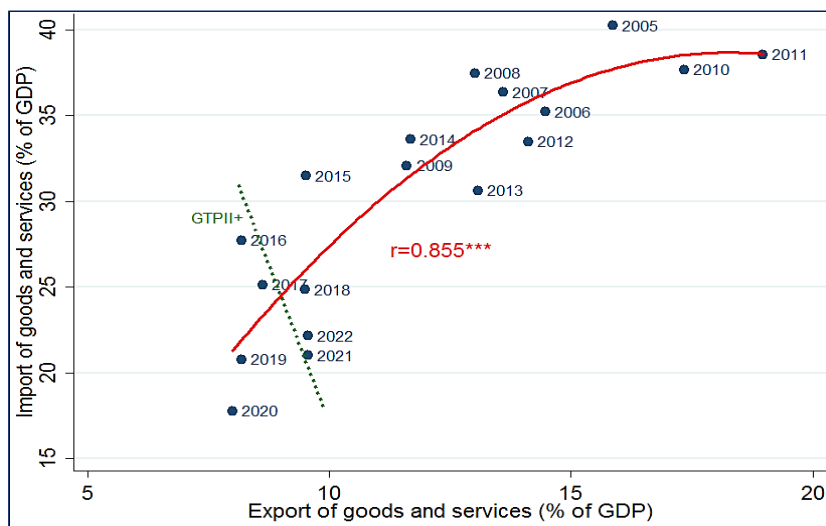
Figure 5.8: Trends of service export shares

Source: Computed from data in the WTO (2017-2022)

The systematic dynamic link between exports and imports reveals the contractionary trend discussed above (Figure 5.9). GDP shares of both exports and imports have been falling since 2005. However, after 2016, exports and imports were inversely associated with inconsistent yearly fluctuations. Compared to the size of the economy, Ethiopia faced a serious shortage of foreign exchange earnings to import. Consequently, the country could not satisfy its import demand particularly during GTPII+ period.

This overall contraction of external trade might arise from the trade policy pursued by the current regime, the inflationary trend adversely affecting prices of exports and external competitiveness, and the domestic conflicts and political violence prevailed in the country.

Figure 5.9: Imports and exports strongly reinforce each other



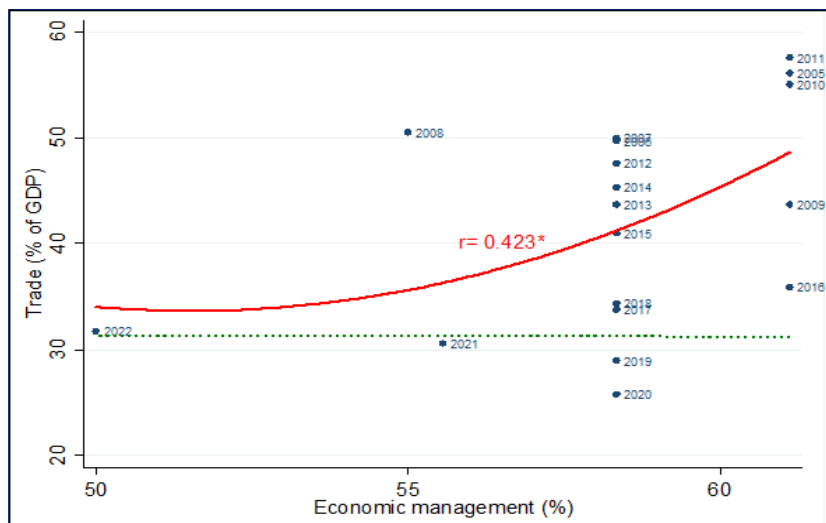
Source: Computed from data in UNCTAD (2005-2023)

The economic management rating of the World Bank captures the quality of macroeconomic management, fiscal policy, and debt policy pursued in countries around the world (World Bank, 2024). The systematic link between the state of economic management⁹ and trade (% of GDP) shows their weak positive association (Figure 5.10). However, external trade has stagnated with poor economic management practiced since 2017 (see broken line in the figure). This contractionary trend arises from imprudent macroeconomic management, fiscal policy, and debt policy adversely affecting the external sector. Over the past two decades, economic management in

⁹ Economic management cluster rating (1=low, 6=high) is the average of quality of macroeconomic management, fiscal policy, and debt policy pursued by the government. For ease of uniform comparison in this study, the rate is rescaled to 100%.

Ethiopia has shown different trends, the poorest policy ever pursued being in 2022.

Figure 5.10: External trade contracting with poor economic management since 2017

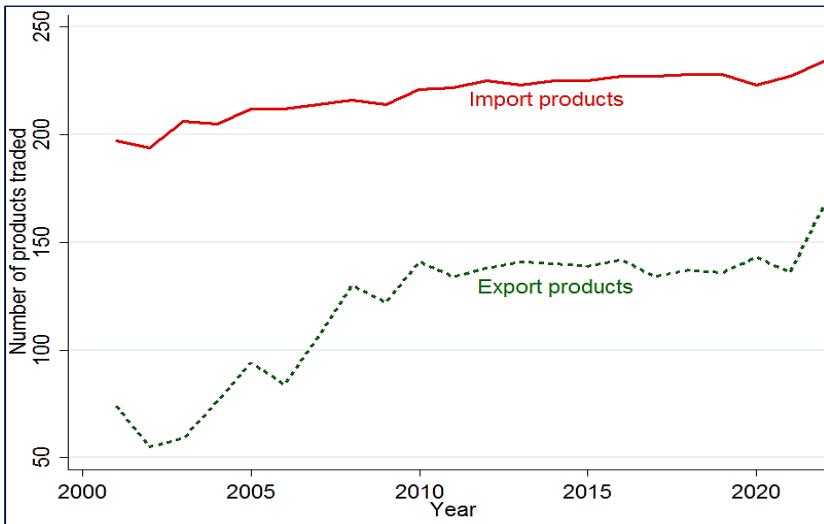


Source: Computed from data in the World Bank (2005-2023)

5.5. Trade Diversification

Diversification of exports and imports is a key determinant of a competitive and resilient economy. In terms of product lines, Ethiopia has undergone substantial changes in the number of products traded over the past 22 years (Figure 5.11). The number of products traded reached 234 for imports and 167 for exports in 2022. Despite the development of the number of export and import products, Ethiopia requires further steps to diversify its external trade.

Figure 5.11: Increasing number of products traded

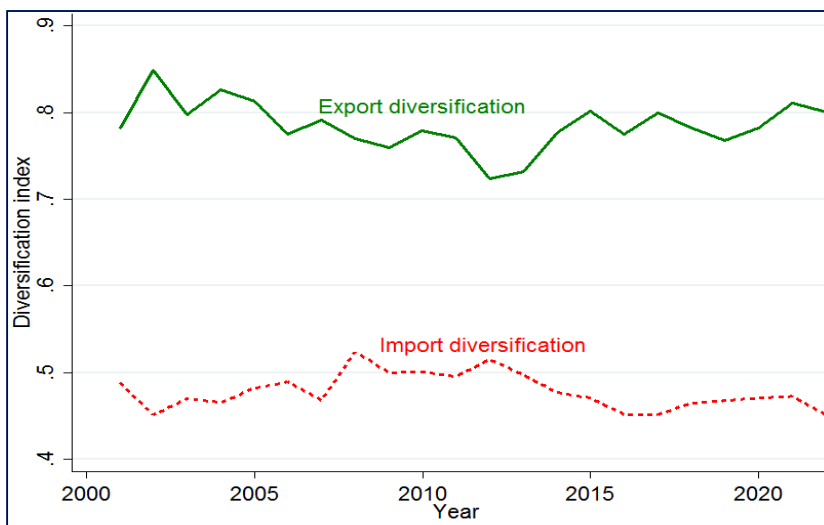


Source: Computed from data in UNCTAD (2001-2022)

Though products traded increased in number, the extent of the differences between the structure of trade of Ethiopia and the world average (measured by the diversity of export and imports) verify little improvements (Figure 5.12). Import diversification index decreased from 49% in 2001 to 45% in 2022, indicating negligible improvement over the two decades.

Export diversification, on the other hand, increased from 78% in 2001 to 80% in 2022, verifying that exports were rather concentrating over the years. Exports were more concentrated on a few products and significantly unchanged over the 22-years period. Export diversification among commodity exporters like Ethiopia depends on size of resource rents, rate of resource depletion, quality of institution, change in terms of trade and exchange rate overvaluation (Giri et al., 2019).

Figure 5.12; Import and export diversification unchanged over the last 22 years

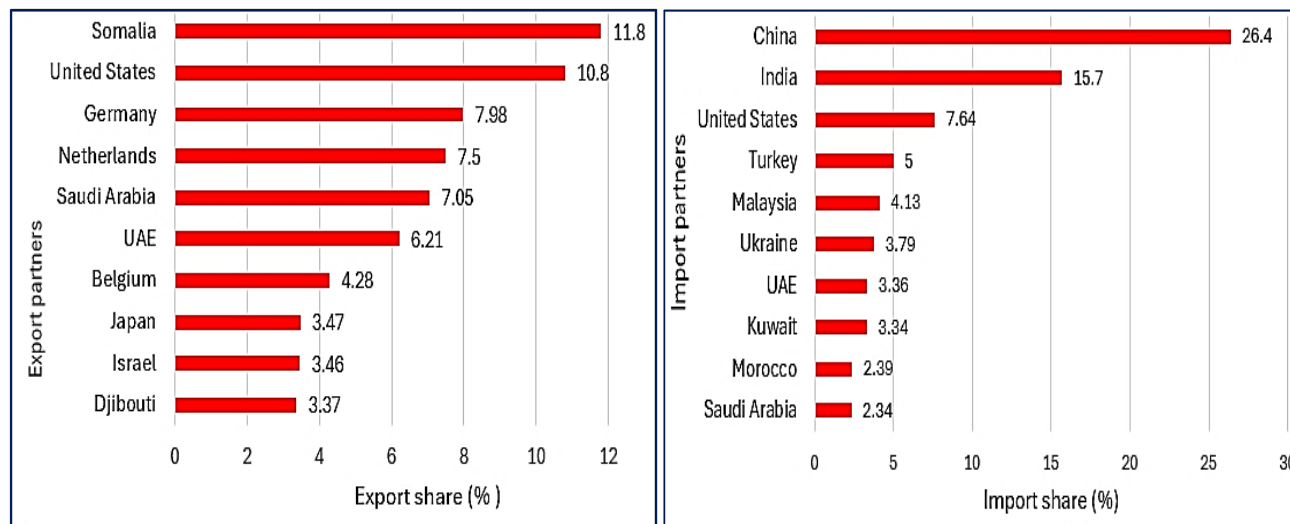


Source: Computed from data in UNCTAD (2001-2022)

5.6. Trade Concentration

Ethiopia's exports and imports are more concentrated to a few countries (Figure 5.13). The top three export partners of Ethiopia in 2021 were Somali (11.8%), United States (10.8%), and Germany (7.9%). The import shares of partners are significantly concentrated to China (26.4%) followed by India (15.7%), and the United States (7.6%). Ethiopia is expected to diversify its export and import partners to help build a resilient economy that can generate stable foreign earnings.

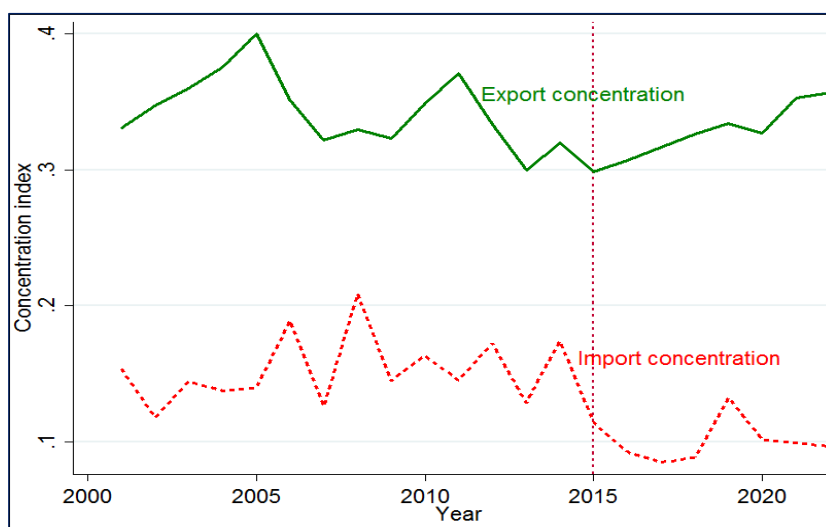
Figure 5.13; Top 10 export and import partners of Ethiopia



Source: Computed from data in Global Edge (2021)

Compared to imports, Ethiopia's exports are more concentrated in a limited number of countries (Figure 5.14). The dynamics of trade concentration in Ethiopia shows limited improvements over the last two decades. Over the period, export concentration varied between 30 and 36 percentage points. Imports were relatively well distributed to many countries around the world. However, import concentration similarly shows little improvement over the period, varying from 10% to 21% only.

Figure 5.14: High and increasing export concentration since 2015



Source: Computed from data in UNCTAD (2001-2022)

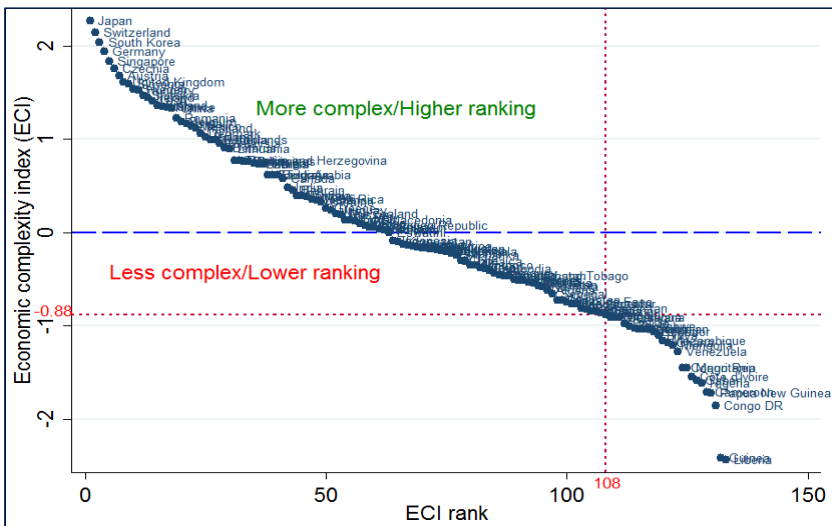
5.7. Economic Complexity

Accumulation of productive knowledge and its use in more complex industries is required for economic development. The Economic Complexity Index (ECI) reported by the Harvard Growth Lab (HGL) is a ranking of countries based on the diversity and complexity of their export basket. High complexity countries are

characterized by a range of sophisticated and specialized capabilities, and the ability to produce a highly diversified set of complex products.

Ethiopia was ranked 108th (out of 133 countries) with an ECI of -0.88 falling under the category of very low ranking (HGL, 2021) (Figure 5.15). It produces and exports less complex products that are less competitive in international markets. Ethiopia requires to accumulate productive knowledge that operates complex industries producing and exporting more and more products. Without improving the export performance and adopting export-led industrialization, the country remains less likely to ensure resilient economic development.

Figure 5.15: Ethiopia's relative status in economic complexity



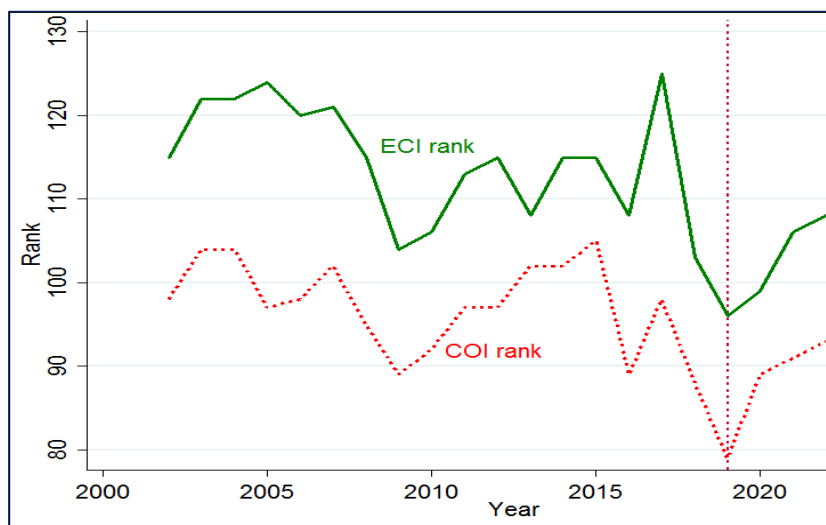
Source: Computed from data in Harvard Growth Lab (2021)

The Complexity Outlook Index (COI) reported by the HGL captures the connectedness of an economy's existing capabilities to drive easy (or hard) diversification into related complex production. It measures a country's potential for diversifying into complex products based on its

current capabilities. The COI also suggests ease of diversification, high COI signifying many nearby complex products linked to current know-how.

The longrun dynamics of rankings for Ethiopia reveal that both ECI and the were slightly improving over the years (Figure 5.16). Despite the slight improvement until 2019, there has not been significant change in the diversity and sophistication of the export products over the period. This improvement was rather reversed since 2020 as shown by the drastic fall of both ECI and COI. This is expected to be driven by domestic conflicts, political violence, and strategic developments severely threatening the export sector and the overall economic activities nationwide. As it stands now, the Ethiopian economy is identified as less connected capabilities requiring hard diversification into related complex production.

Figure 5.16: ECI and COI ranks for Ethiopia slightly improving until 2019



Source: Computed from data in Harvard Growth Lab (2001-2021)

The complexity of export products of Ethiopia is demonstrated by the share of export product categories (Table 5.1). Ethiopia's exports are dominated by raw materials (73%) or agricultural commodities that are less complex produced by less complex industry largely operated by smallholder farmers. These agricultural commodities are obviously less competitive in the international markets. Other export products such as consumer goods (16%), intermediate products (9.7%), and capital goods have very low export shares. The composition of imports of Ethiopia, on the other hand, are dominated by consumer goods (40.5%), intermediate goods (29%), and capital goods (22.8%).

Table 5.1: Exports and imports of product groups for Ethiopia (2021)

Product categories	Export product share (%)	Import product share (%)
Raw materials	73.2	7.7
Intermediate goods	9.70	29.0
Consumer goods	16.0	40.5
Capital goods	1.1	22.8

Source: Compiled from data in WITS (2021)

The economic complexity and complexity of export products of a country are directly associated. The Product Complexity Index (PCI) reported by the HGL ranks the diversity and sophistication of the productive know-how required to produce a product. The most complex products (products with a high PCI value) produced only by a few countries include electronics and chemicals. The least complex products (with low PCI values) produced by nearly all countries include raw materials and simple agricultural products. Ethiopia is one of such countries largely producing and exporting agricultural raw materials.

The complexity of top 10 export products of Ethiopia in 2021 shows that all of them are ranked very low (Table 5.2). Out of 1,221 products traded and ranked worldwide, Coffee covers 36.5% of the exports with a very low PCI and lower ranking (1,133). Except gas turbines covering 2.1% of total exports, all the other exports are less complex produced by less complex industries requiring very low productive knowledge like farming. To realize economic development led by the export sector that can generate stable export earnings, Ethiopia is required to go more steps to diversify and sophisticate its export products.

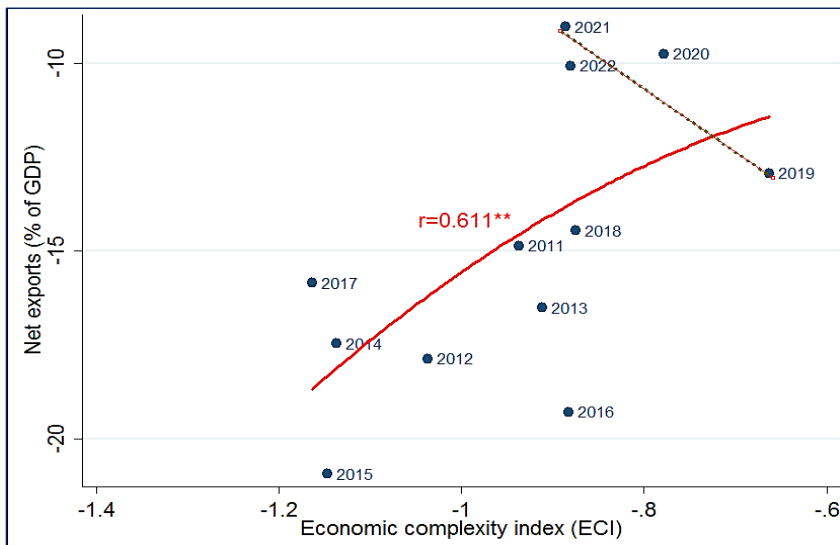
Table 5.2: Complexity of top 10 export products of Ethiopia (2021)

Export	Share of export value (%)	Product complexity index (PCI)	PCI rank (1221 products)	Complexity
Coffee	36.5	-2.262	1133	Very low
Gold	12.9	-1.986	1026	Very low
Cut flowers	6.01	-1.578	1135	Very low
Other vegetable	5.55	-1.216	1052	Very low
Other oil seeds	4.99	-2.262	1202	Very low
Dried legumes	4.22	-2.180	1198	Very low
Sheet and goat meat	2.19	-1.568	1133	Very low
Gas turbines	2.08	0.795	290	High
Non-knit men's suits	1.68	-1.352	1057	Very low
Cassava	1.36	-2.159	1196	Very low
Total exports (billion US\$)	4.24			

Source: Compiled from data in Harvard Growth Lab (2021)

The longrun dynamic link between ECI and net exports verifies their strong positive association (Figure 5.17). Trade deficit was reduced, and net exports significantly enhanced with increasing economic complexity in Ethiopia. This long-term trend, however, has been reversed since 2019 when conflicts and political violence started to widely prevail. The evidence generally shows that Ethiopia's exports are severely affected by several factors particularly experienced since 2019. Unlike the trend in the previous years, the trade deficit was reduced with deteriorating economic complexity since 2019.

Figure 5.17: Trade deficit reduces with increasing economic complexity



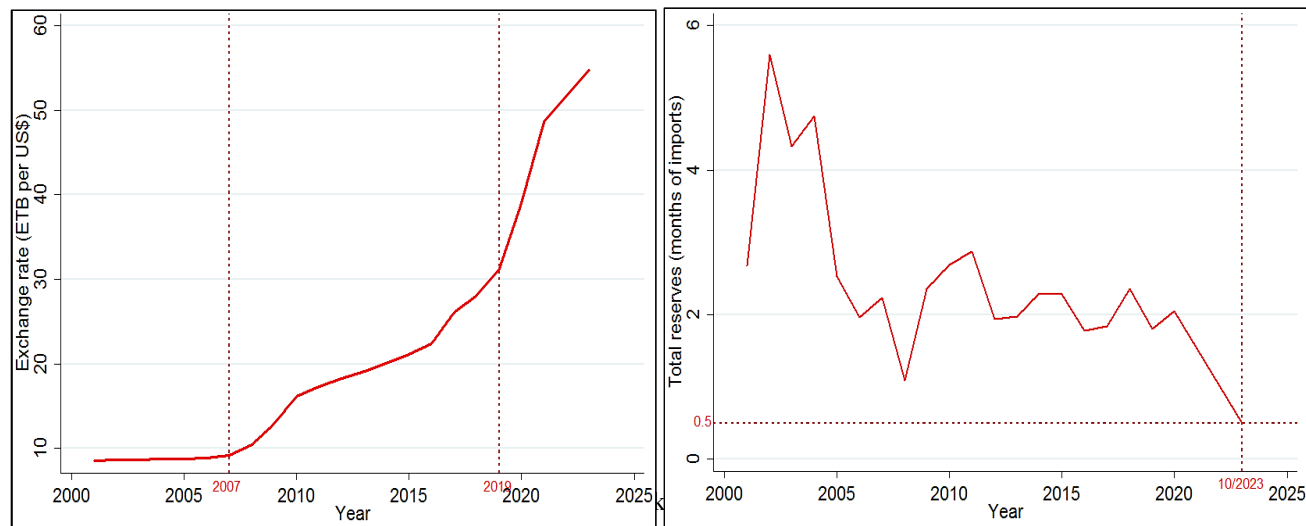
Source: Computed from data in the NBE and Harvard Growth Lab (2001-2021)

5.8. Depreciation of Exchange Rate

Exchange rate is one of the macroeconomic variables directly affecting the real economy through changes in the demand for exports and imports. Through depreciation of local currency, exports can be made more competitive in international markets and imports less competitive in domestic markets, eventually leading to increasing demand for domestically produced export goods.

Devaluation has been one of the conditionalities for Ethiopia to access external loans. Depreciation of local currency in Ethiopia shows an exponential trend particularly since 2019 (left panel of Figure 5.18). Devaluation of local currency due external pressures from international financial institutions had several macroeconomic consequences. Despite the continuous depreciation of currency, the expected benefits of depreciation were not reflected in the economy (right panel of the figure). The country's foreign reserves have fallen and reached below US\$ 1 billion, covering less than two weeks of imports (UNDP, 2024). Moreover, the local currency remained overvalued in both the official and parallel markets. Consequently, the government is strongly challenged by international financial institutions to further depreciate the local currency.

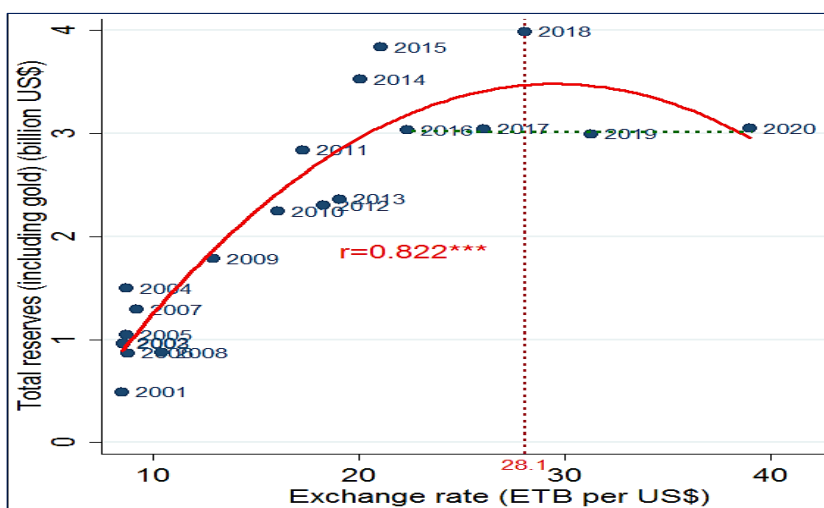
Figure 5.18: Pattern of local currency depreciation and foreign reserves in Ethiopia



Source: Computed from data in the NBE, the World Bank, and UNDP (2001-2023)

Foreign reserves are expected to absorb shocks against factors adversely affecting the exchange rate. The central bank uses its currency reserves to maintain a steady exchange rate. Foreign reserves in Ethiopia are inadequate to maintain the exchange rate. Depreciation of local currency helped maintain the exchange rate until 2018 at ETB 28.1 per US\$ and foreign reserves of US\$ 4.0 billion (that can cover four months of imports) (Figure 5.19). Depreciation of the currency beyond ETB 28.1 per US\$ had led to rapid depletion and a serious shortage of foreign reserves to satisfy the country's huge demand for imports (see the broken line connecting the years).

Figure 5.19: Total reserves rising with devaluation until 2018



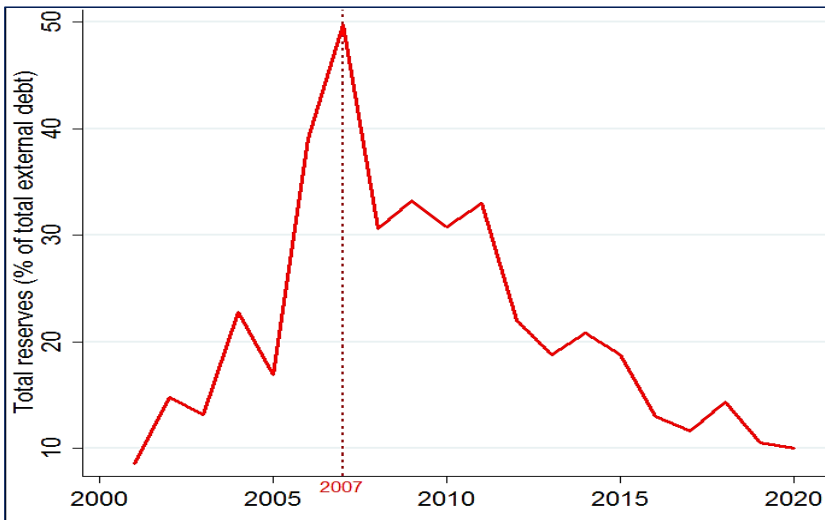
Source: Computed from data in the World Bank (2001-2020)

In countries like Ethiopia where external debt is denominated in foreign currency, external debt servicing is directly associated with foreign reserves. Reserves can be used to make interest payments and principal repayments on external debts. The availability of adequate foreign

reserves ensures that the country does not default on its debt obligations.

Debt servicing for Ethiopia was improving and reached its maximum at the foreign reserves of US\$ 2.3 billion in 2007, which can cover about 50% of the country's external debt (Figure 5.20). After 2007, external debt servicing rapidly deteriorated and reached below US\$ 1 billion, lower than two weeks of imports in September 2023 (UNDP 2024). As a result, Ethiopia formally defaulted on \$33 million interest repayment on its US\$ 1 billion Eurobond and joined Zambia and Ghana, the other bond defaulters on the continent (The Est African, 2023).

Figure 5.20: External reserves (as a % of external debt) drastically falling since 2007



Source: Computed from data in World Bank (2001-2020)

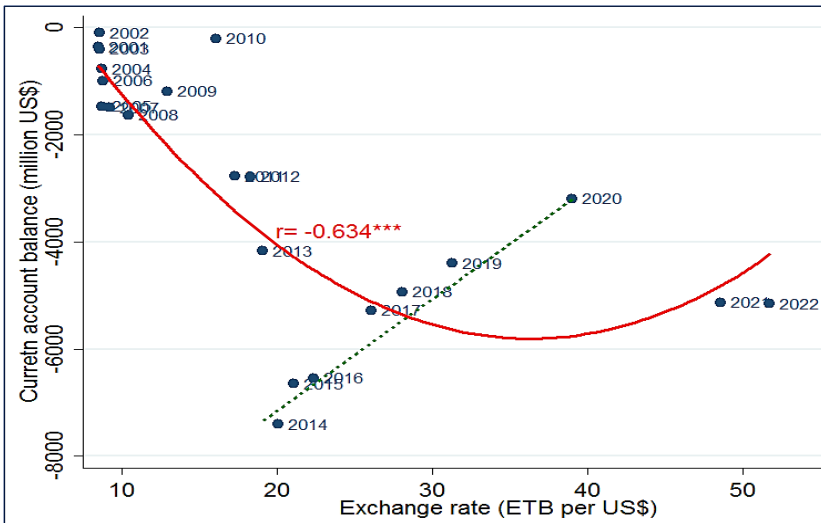
The exchange rate has a significant influence on the trade balance and the current account. An overvalued currency makes imports cheaper and exports less competitive. This widens the current account deficit or

narrows the surplus. The related concept is the Marshall-Lerner condition which states that depreciation of a currency will help reduce a current account deficit, if the sum of the price elasticity of demand (PED) for exports and imports is greater than 1 (price elastic). Depreciation of currency helps in increasing demand for exports and reducing demand for imports if the prices of exports and imports are price elastic. Stated differently, if the demand for exports and imports is elastic, more exports and less imports will lead to a reduced current account deficit.

The systematic dynamic link between exchange rate and current account balance in Ethiopia is against the Marshall Lerner condition (Figure 5.21). Deprecation of currency has increased the current account deficit. However, the dynamic link between them for the period between 2014 and 2020 is supported by the Marshall-Learn condition (see the broken line in the figure). The current account deficit (US\$ 7,407 million) at the exchange rate of ETB 20.1 in 2014 was reduced to US\$ 3,192 million at the exchange rate of ETB 39 in 2022. The effect of the depreciation of the local currency on the current account balance in the seven-years period was as expected.

The value of a country's currency and its exchange rate significantly influence the level of inflation. When inflation is high, it makes the currency weaker, suppresses investment, and adversely affects the exchange rate. If the currency depreciates, imports become more expensive, and consequently, the cost of imports affects domestic prices, often triggering inflation. Depreciation is one of the external sources of cost-push inflation that leads to a rise in the prices of imports. A real appreciation of the local currency makes producers to increase output supplied because of the lower cost of imports. On the other hand, higher money demand (the desire to hold money) will imply lower inflation mainly due to fixed or pegged exchange rates enhancing confidence that can engender a greater demand for the local currency.

Figure 5.21: Exchange rate depreciation reducing current account deficit until 2020

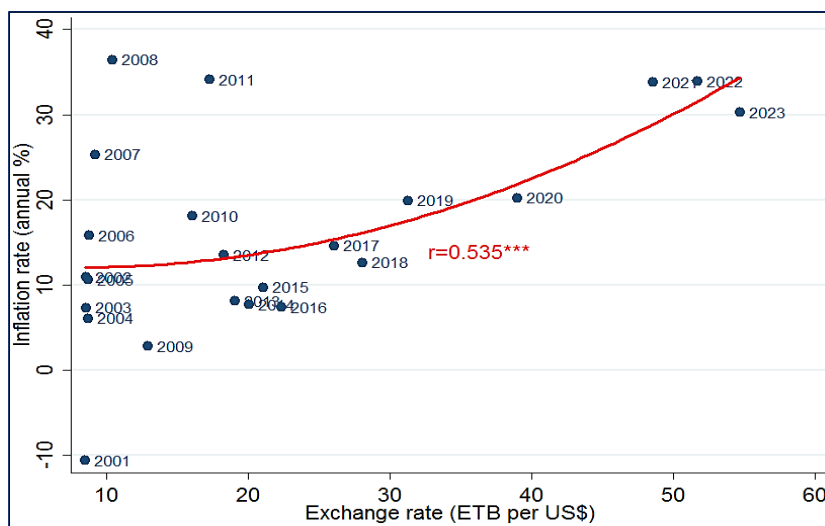


Source: Computed from data in the NBE and the World Bank (2001-2022)

Depreciation of local currency in Ethiopia has led to an inflationary trend (Figure 5.22). Depreciation of local currency over the past 23 years (particularly since 2014) was significantly and directly associated with inflation. The exchange rate in 2001 (US\$ 8.5) at an annual deflation of 10 percent (below zero) was depreciated to US\$ 54.7 at 30.2% inflation in 2023.

When a country's exchange rate increases relative to another, the price of its goods and services increases. This makes imports cheaper and exports more expensive, leading to increased imports and decreased exports. The rising level of imports accompanied by a growing trade deficit adversely affects the exchange rate.

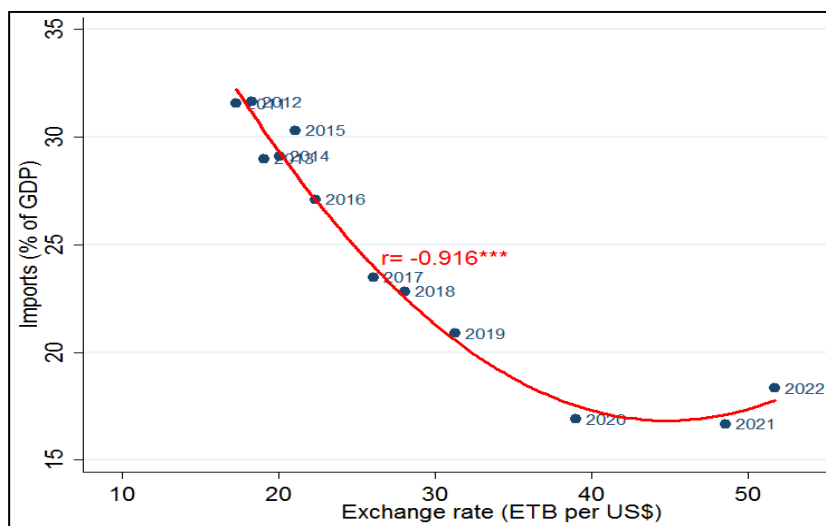
Figure 5.22: Devaluation of local currency was inflationary in Ethiopia



Source: Computed from data in the NBE (2001-2023)

The dynamic link between the exchange rate and imports over the last decade reveals their strong negative association (Figure 5.23). Compared to the size of the economy and the demand for imports, due to the consistent and increasing depreciation of the domestic currency, imports of goods and services in Ethiopia were substantially contracted. In 2012, Ethiopia was able to import goods and services valuing 31.6% of its GDP. However, in 2022, imports were reduced by 18.6% (at US\$ 18.3 exchange rate), leading to high prices of imports mainly attributable to depreciation of the local currency (US\$ 51.8 in 2022).

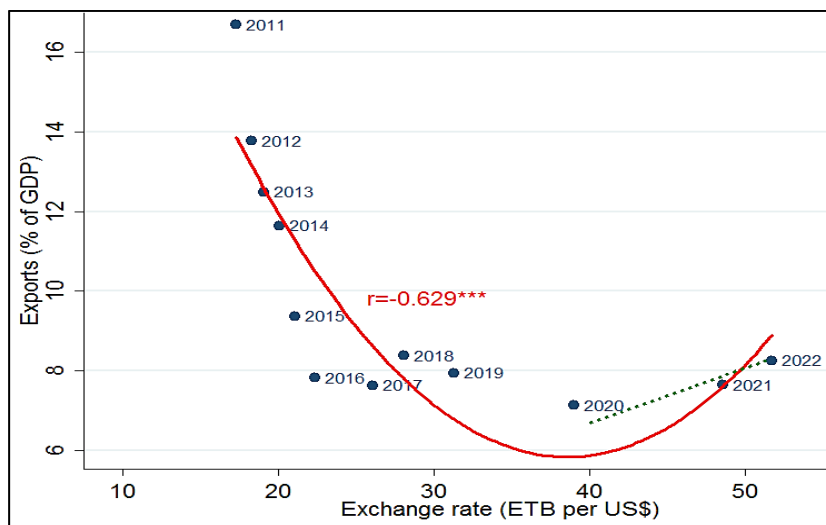
Figure 5.23: Import of goods and services falling with devaluation of local currency



Source: Computed from data in the NBE (2001-2022)

The systematic link between exchange rate and exports (% of GDP) in Ethiopia was negative until 2020 (Figure 5.24). Devaluation of the local currency didn't help increase exports in Ethiopia. Its export (16.2% of GDP) in 2011 was reduced by twofold (8.2% of GDP) in 2022. Despite the consistent depreciation of the local currency to fulfil conditionalities of external loans, the demand for the local currency remained less. Overall, depreciation of local currency in Ethiopia has not been effective to serve its purpose.

Figure 5.24; Exports of goods and service deteriorating with devaluation of local currency



Source: Computed from data in the NBE (2001-2022)

5.9. Globalization

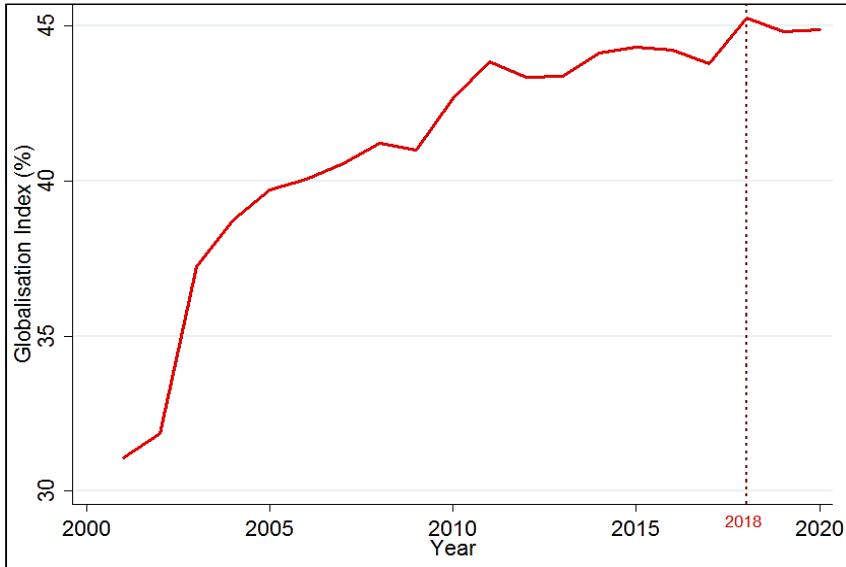
5.9.1. Dynamics

Globalization is the interdependence of economies, cultures, and populations through cross-border trade in goods and services, technology, and flows of investment, people, and information. Trade, as a key instrument of globalization, is expected to affect the performance of the external sector of countries. Globalization index, which measures the economic, social, and political dimensions of globalization, shows improvements on political and social globalization but deterioration of economic globalization in Ethiopia (Figure 5.25).

Ethiopia, as the capital of the African Union, the role it played in the UN peacekeeping mission, and the associated availability of many

embassies and international NGOs, political globalizations and social globalization are better.

Figure 5.25: Dynamics of globalization for Ethiopia



Source: Computed from data in KSEI (2001-2021)

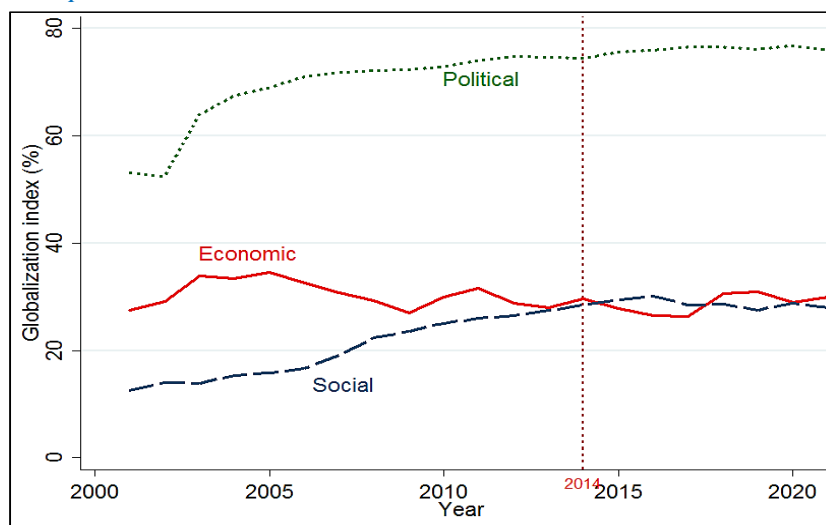
The relative contributions of political globalization and social globalization to overall globalization in Ethiopia over that last two decades are relatively high and comparable (48.9% and 48.5%) (Table 5.3). However, economic globalization has been very low and deteriorating since 2014. Ethiopia, as many developing countries, is losing the economic benefits of globalization arising from its participation in international trade.

Table 5.3: Relative contributions of dimensions of globalization

Dimensions of globalization	Relative contribution (%)
Economic	2.4
Social	48.9
Political	48.5
Residual	0.2

Source: Computed from data in KSEI (2001-2021)

Over the years, while social and political dimensions of globalization showed significant rise, economic globalization was deteriorating (Figure 5.26). When domestic conflicts and political violence started to widely prevail in Ethiopia since 2015, all dimensions of globalization were stagnated or nearly unchanged.

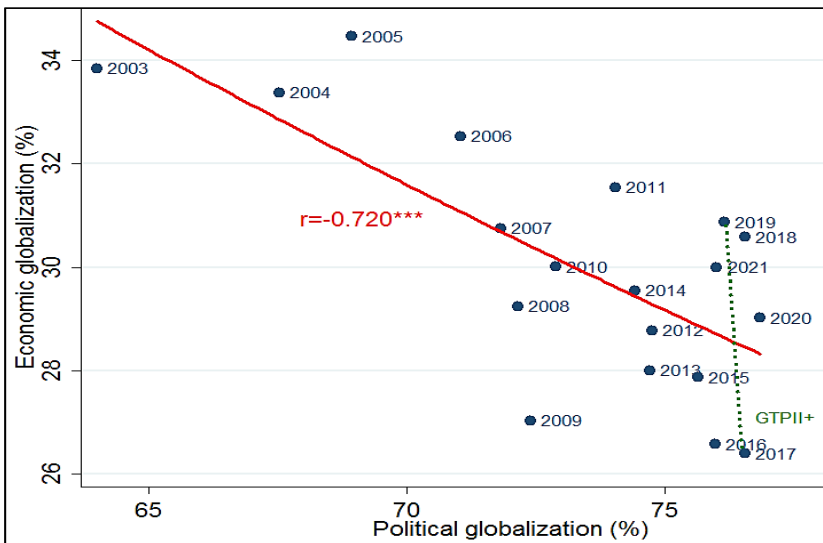
Figure 5.26: Very low and deteriorating economic globalization for Ethiopia

Source: Computed from data in KSEI (2001-2021)

5.9.2. Consistency

The three dimensions of globalization are expected to reinforce each other and enhance overall globalization, trade, and development. The longrun dynamic link between economic and political globalization shows strong inverse association (Figure 5.27). Though political globalization was better, its role in enhancing economic globalization was rather negative. Political globalization was not aligned with the expected economic benefits. It was enhanced against the benefits of economic globalization. However, the long-term negative trend between economic globalization and political globalization has changed since 2017. Political globalization has stagnated in recent years, which might have arisen from the external pressures associated with the domestic conflicts and political instabilities widely prevailed.

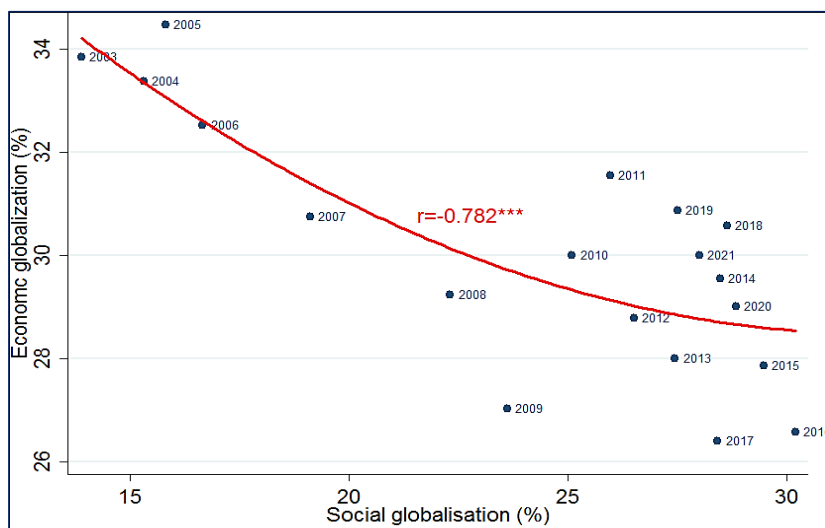
Figure 5.27: Economic and political globalization with opposing objectives



Source: Computed from data in KSEI (2001-2021)

Similarly, social globalization was not aligned with the economic objectives of globalization (Figure 5.28). Social globalization was enhanced with the expense of economic globalization. Trade and financial globalization (the components of economic globalization) are deteriorating with increased social globalization. This might arise from inconsistent globalization measures, and irrelevant trade and financial policies pursued by the government without considering the strategic benefits of the nation expected from economic globalization.

Figure 5.28: Economic globalization contracting with rising social globalization



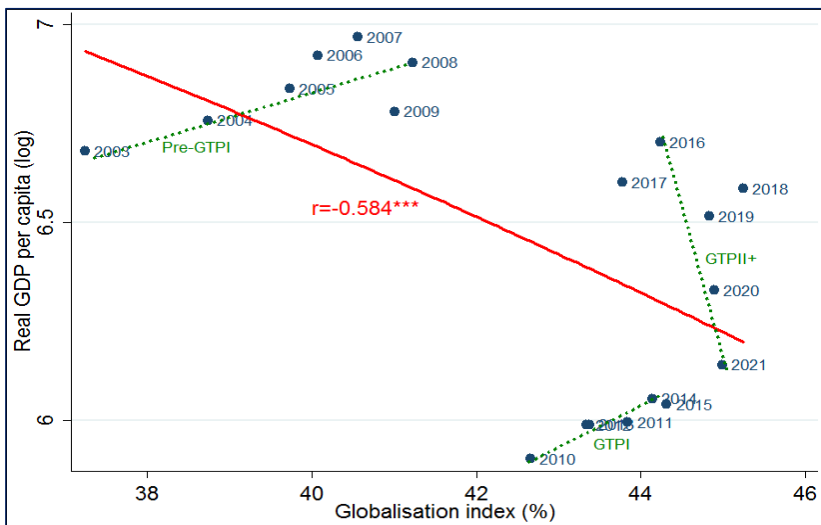
Source: Computed from data in KSEI (2001-2021)

5.9.3. Socioeconomic impacts

The longrun dynamic link between economic growth (measured by real GDP per capita) and economic globalization shows significant inverse association, suggesting that Ethiopia is losing development benefits of economic globalization (Figure 5.29). In the longrun, economic growth

in Ethiopia is slowed with increased globalization with the rest of the world. However, in the medium-term, the link between economic growth and globalization is different. In the pre-GTP and GTPI periods, economic growth and globalization were differently associated. There was a significant positive structural shift of globalization during GTPI. This positive shift was reversed during GTPII+ verifying that economic growth was slowed with stagnated globalization.

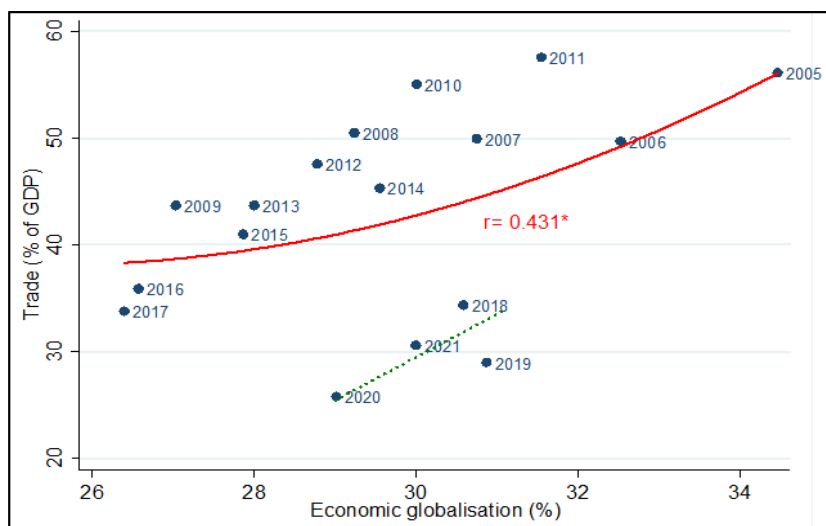
Figure 5.29: Economic growth slowed with increased globalization



Source: Computed from data in KSEI and NBE (2001-2021)

However, external trade is found to have a weak positive association with economic globalization (Figure 5.30). As expected, trade openness was enhanced with increased trade and financial globalization. In recent years (since 2019), the least trade openness has ever been recorded. This might arise from the external trade policy pursued by the incumbent regime and the widespread domestic conflicts.

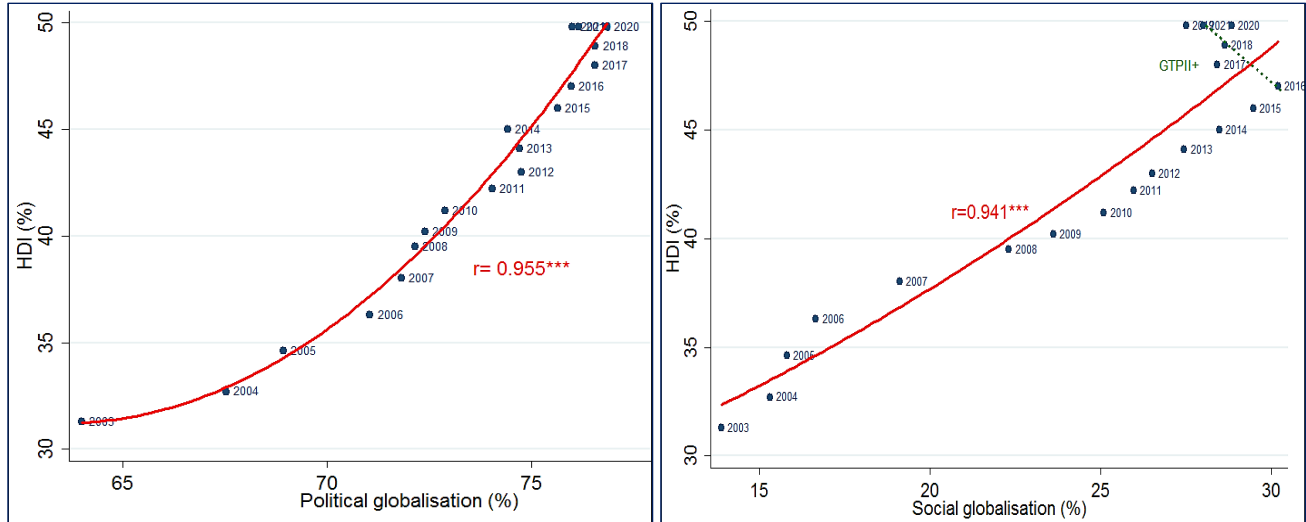
Figure 5.30: External trade weakly associated with economic globalization



Source: Computed from data in the NBE and KSEI (2001-2021)

Social progress in Ethiopia was significantly enhanced by political and social globalizing (Figure 5.31). The political and social dimensions of globalization (including interpersonal, informational, and cultural globalization) have significant roles in enhancing social welfare dimensions of human development. On the contrary, as discussed above, they have adversely and strongly associated with the economic dimensions or living standards of citizens. Overall, globalization in Ethiopia was enhancing by the political and social benefits but adversely affecting expected economic gains.

Figure 5.31: Social progress strongly enhanced by political globalization



Source: Computed from data in KSEI and UNDP (2001-2021)

5.10. Concluding Remarks

Performance of the external sector for Ethiopia is generally very weak and worsening for years. Overall balance of payments and current account balance deficits were increasing. External trade and trade openness have been contracting over the last decade. Imports were rising with contracting exports in recent years (GTPII+ period). The contraction of external trade was significantly attributable to the imprudent economic management policy pursued.

Ethiopia produces and exports less complex products that are less competitive in international markets. Its exports are dominated by agricultural commodities mainly produced by smallholder farmers. Exports and imports are also less diversified or more concentrated. Import and export diversification was unchanged for years.

Depreciation of the local currency in Ethiopia has adversely affected the economy. Total foreign reserves were deteriorating with devaluation. The current account deficit was rising with exchange rate depreciation. Above all, devaluation of local currency was inflationary causing contraction of export and import of goods and services.

Globalization has been stagnating in recent years. Economic globalization was very low and deteriorating with negligible economic benefits arising from participation in international trade. Economic growth was rather slowed with increasing globalization. Economic globalization had a very weak contribution to external trade. The three dimensions of globalization were not aligned, leading to opposing objectives and outcomes.

Ethiopia should formulate prudent external trade policy aimed to diversify exports through the production and export of more complex and competitive products that can increase and stabilize export earnings. The initiatives to promote the diversity and uniqueness of

exports by industrial parks should be revitalized. The demographic pressure for more imports calls for the need to increase and diversify sources of foreign earnings.

Above all, formulation and implementation of prudent economic management policy that can improve performance of the external sector is important. Policy measures related to exchange rates, imports and exports, tariffs, inflation, budget, and debt should be aligned and properly managed. Ethiopia is expected to formulate relevant exchange rate policy and employ appropriate exchange rate regime that can promote economic growth, macroeconomic stability, foreign reserves, and secure investment environment.

References

- Giri, R. S. N. Quayyum, R. J. Yin. (2019). Understanding Export Diversification: Key Drivers and Policy Implications, IMF WP/19/105
- Global EDGE. (2021). Ethiopia Trade Statistics, available at <https://globaledge.msu.edu/countries/ethiopia/tradestats>
- Growth Lab. (2021). Country and Product Complexity Rankings, available <https://atlas.cid.harvard.edu/rankings>
- Harvard Growth Lab (HGL). (2021). The Atlas of Economic Complexity, available at <https://atlas.cid.harvard.edu/>
- KSEI (Kof Swiss Globalization Index). (2021). Kof Globalization Index, available at <https://kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-globalisation-index.html>
- NBE (National Bank of Ethiopia). (2022). Annual Bulletin 2021/22, Addis Ababa, Ethiopia.
- The East African. (2023). Ethiopia's Bad Year: From Unending Civil War to Drought, Default on Eurobond, available at <https://www.theeastafrican.co.ke/tea/news/rest-of-africa/ethiopia-s-bad-year-civil-war-drought-default-eurobond-4477916#:~:text=Ethiopia%20formally%20defaulted%20on%20%2433,bond%20defaulters%20on%20the%20continent.>
- UNCTAD (United Nations Trade and Development). (2024). Statistics, available at <https://unctadstat.unctad.org/datacentre/>
- _____. (2024). Productive Capacities Index, available at <https://unctad.org/statistics>
- _____. (2005). Determinants of Export Performance, Developing Countries in International Trade, Trade and Development Index, available at https://unctad.org/system/files/official-document/ditctab20051ch2_en.pdf

- UNDP (United Nations Development Program). (2021). Human Development Reports, <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>
- WITS (World Integrated Trade Solutions). (2021). Ethiopia Trade, available at <https://wits.worldbank.org/CountrySnapshot/en/ETH>
- World Bank. (2024). World Development Indicators. Available at <https://databank.worldbank.org/source/world-development-indicators>
- _____. (2024). World Development Indicators. Available at <https://databank.worldbank.org/source/world-development-indicators>
- WTO (World Trade Organization). (2024). Trade and Tariff Data, , available at <https://stats.wto.org/>

6. PERFORMANCE OF THE FINANCIAL SECTOR

6.1. Introduction

Ethiopia's financial system is one of the least developed in the world. With total assets amounting to 46% of the GDP, the country's financial system is small and does not effectively support the needs of its growing economy (Chauffour and Gobezie, 2019). According to the World Bank's 2015 Enterprise Survey, 40% of firms identified access to finance as the main impediment to their successful business. Additionally, in the 2023 Global Competitiveness Report, Ethiopia was ranked 124th out of 140 countries in terms of financial system development.

The underdeveloped and fragile financial system is hindering the development of the private sector. This is reflected in the low level of private sector credit to GDP ratio, which was just 11%. This is half the average seen among the 20 largest African economies (22%), indicating a level of intermediation that does not meet the needs of the real economy in any significant measure (World Bank, 2019). Evidence suggests that the credit market was skewed towards State-owned Enterprises (SOEs). In contrast to a decline in the overall domestic and private credit over the past 10 years, SOEs' credit as a percentage of GDP has more than tripled in the last 10 years, from 5.2% in 2007 to 17.2% in 2018 (Chauffour and Gobezie, 2019). However, there has been a change in the banking sector's loan portfolio recently. According to NBE (2024), since 2021, the total banking sector credits to the private sector have exceeded loans to the public sector. In 2018, 58.5% of the credit went to the public sector, while the remaining 41.5% went to the private sector. Before 2021, the public sector had been receiving more than half of the banking sector's credit.

Ethiopia's financial sector has been operating under a financial repression¹⁰ framework for the past decade, which involves managing monetary and foreign exchange policy and financing large infrastructure projects and SOEs. It happens when governments implement policies that channel funds to themselves that would otherwise go elsewhere in a free market. In Ethiopia, this framework includes National Bank financing of the government, a state-dominated banking sector, mandatory financing of priority projects and directed credit, administered interest rates, a captive domestic market for government debt, high liquidity, and capital requirements, and strict foreign exchange controls. Over time, this framework has led to the accumulation of significant macro-financial imbalances. These imbalances include fiscal dominance, inflationary pressures, overvaluation of the Birr, chronic foreign exchange shortages, underdevelopment of the financial system, biased credit allocation toward the public sector, and overall risk of malinvestment (World Bank, 2019).

The total assets of the financial sector reached Birr 3,120.5 billion in 2023, marking a 20.4% increment compared to the previous year. These assets accounted for 35.8% of the GDP. Notably, the banking sector dominated the financial sector, with its total assets making up 96.3% of the overall financial sector assets as of June 2023. This indicates that the stability of the Ethiopian financial system heavily relies on the health and stability of the banking sector (NBE, 2024). Ethiopia's banking sector is experiencing robust growth. According to NBE (2024), the total deposits reached Birr 2.2 trillion by June 2023,

¹⁰ Financial repression refers to a variety of policies, government regulations, laws, and market restrictions to capture a significant portion of the financial system's resources for funding the public sector at below-market prices (Chauffour and Gobezie, 2019).

representing 24.8% of GDP, and loans & bonds issued by banks reached Birr 1.9 trillion (21.7% of GDP). Both figures show a healthy increment of more than 24% compared to the previous year. However, due to growth in the GDP, the relative share of deposits, and loans bonds in the GDP has decreased. Deposit shares dropped from 28.2% to 24.8%, and loans and bond shares reduced from 16.0% to 14.3%.

The expansion of the banking sector was led primarily by the two state-owned banks (Commercial Bank of Ethiopia and Development Bank of Ethiopia), which dominate the industry (World Bank, 2019). Over the past few years, private banks have steadily increased their market shares in branch networks, deposits, loans, and profits (CEPHEUS, 2020). The state-owned CBE, the only large bank in the country according to NBE's classification, dominates the industry. In 2023, CBE's total assets and deposits constituted almost half (49.5% and 48.7%, respectively) of the banking sector. On the other hand, during the same period, the combined assets and total deposits of the five medium-sized banks accounted for 28 and 29.4% of the sector's total, respectively (NBE, 2024).

The 2024 Global Financial Development data reveal that Ethiopia's banking sector exhibits a high concentration in terms of market participants. For example, in 2020, the concentration index of the banking industry was 76%. In contrast, the comparative figures for other East African countries were 42.6% for Kenya, 62% for Rwanda, and 67.3% for Uganda. The high concentration of the banking industry is reflected in the asset portfolio composition, with private banks being crowded out by government policies that favor the Commercial Bank of Ethiopia (CBE) and the Development Bank of Ethiopia (DBE). Additionally, the government extensively finances large infrastructure projects and SOEs through the CBE (Chauffour and Gobeze, 2019). Global Financial Development data from the World Bank also shows

that in 2021, the concentration of assets in the top 5 banks in Ethiopia was 66.3%, compared to the 60% in Kenya.

The financial system in Ethiopia is dominated by banks, of which one state-owned bank holds about 50% of the assets. As such, there is limited competition in the industry. Competition is limited as shown by the high concentration ratio and spread between lending and deposit rates (World Bank, 2019). The limited competition was because, among others, the financial system had been predominantly closed to foreign investment. Considering the limitations of this restriction, the government of Ethiopia (GoE) has made several policy reforms in the financial service industry as part of the Homegrown Economic Reform Agenda. In this reform, the GoE aims to transform the current financial system into a more market-driven one through privatization and liberalization. On September 3, 2022, the Council of Ministers approved a policy document that will enable the entry of foreign banks into Ethiopia. According to the draft policy document, the modalities of entry and operation of foreign banks in Ethiopia include a subsidiary mode where foreign banks establish a subsidiary bank in Ethiopia; a branch operation model where foreign banks would be allowed to operate through a local branch they open in Ethiopia; and joint ventures in the form of share purchase from local banks (First Consult, 2023). The Ethiopian Parliament approved the new Banking Business law, which allows foreign banks to enter the Ethiopian market, on December 17, 2024. This measure along with other macroeconomic reforms such as the floatation of currency in July 2024 will bring many more competitors to the industry.

Although there are variations in profitability across banks, overall profitability (profit after tax) in Ethiopia's banking industry has been rising. Other indicators of industry profitability show mixed evidence. The return on assets of private banks declined from 3.3% in 2013/14 to

2.5% in 2019/20, while the average return on equity increased from 20.5% to 28.3% during the same period (CEPHEUS, 2020). According to the NBE (2024) report, though it has shown a declining trend over the past few years, the sector's overall profitability is still sufficient. The profitability of banks in Ethiopia is positively affected by their size, liquidity ratio, capital adequacy, leverage, and real GDP (Isayas, 2022).

Ethiopia's overall standing in financial inclusion is very low even by sub-Saharan Africa (SSA) standards. Though a critical element in fostering economic development, according to the Global Findex data in 2022, only 46% of adults had a transaction account, highlighting the ongoing challenge in financial inclusion. This number has grown from 35% in 2017 and 22% in 2014, demonstrating some positive movement. However, Ethiopia lags behind neighboring countries like Kenya, where 79% of adults have accounts. Additionally, the national average falls below the SSA region's overall rate of 55%. Not only is the uptake of digital financial services very low in Ethiopia but it is below the regional average. In Ethiopia, only 5.3% of the people had mobile money accounts in 2022, compared to 33% on average for SSA countries.

This chapter delves into the performance of Ethiopia's financial sector. It analyzes recent developments and assesses the performance of both the financial and monetary sectors. The remainder of the chapter is organized as follows. Section 6.2 offers an overview of data and methods. Section 6.3 highlights the latest monetary policy and delves into developments within the monetary sector. Inflation trends and their connection to money supply growth are explored in section 6.4. Section 6.5 focuses on the financial sector's performance, examining profitability and efficiency. Sections 6.6 and 6.7 explore the state of financial inclusion and digital financial services. Finally, a concluding remark is given in the final section.

6.2. Data and Methods

The data for key variables of interest were primarily extracted from the National Bank of Ethiopia's annual reports. In cases where data is not available from the NBE, alternative sources such as the IMF's database, the World Bank's World Development Indicators, the Global Financial Development Report, and the Findex database were used. This chapter employs graphics, trend analysis, tabulation, and policy document review as the main analytical tools for data analysis.

6.3. Monetary Developments

6.3.1. *Monetary policy*

The chapter begins by painting a broad picture of recent developments in the monetary sector. Ethiopia's monetary policy is primarily managed by the NBE to achieve various objectives. The Bank prioritizes price stability, financial stability, and sustainable economic growth in its monetary policy framework. However, despite these goals, Ethiopia has grappled with persistently high and rising inflation in recent years.

In its August 2023 monetary policy statement, NBE made a significant step towards curbing inflation. Concerned about rising inflation, the NBE has recently adopted a more accommodative monetary policy stance, shifting away from its previous expansionary approach. This involves raising interest rates and tightening liquidity to dampen inflationary pressures. It announced a cap on commercial bank credit growth at 14%, aiming to restrict the money supply and manage inflationary pressures. This approach contrasts with the NBE's previous reliance on managing monetary aggregates. Furthermore, commercial banks have independently raised their average lending rates from 14.3% in 2022 to 14.8% in 2023. This increment likely reflects rising

operational costs and the need to account for higher risk premiums in a volatile economic environment.

The other two key changes made by the NBE likely aimed at controlling inflation are reducing government borrowing and increasing borrowing costs for commercial banks. The NBE plans to significantly restrict direct loans (Direct Advances) to the government in 2023/24). These loans will be limited to just one-third of the amount provided in the previous year (2022/23). Additionally, an agreement will be sought with the Ministry of Finance (MoF) to ensure this emergency lending facility is only used as a last resort. This suggests the NBE is aiming to limit government spending, which can contribute to inflationary pressure if not financed properly. Moreover, the NBE is raising the interest rate on its Emergency Lending Facility from 16% to 18%. This facility provides short-term loans to banks facing liquidity issues. By increasing the interest rate, the NBE discourages banks from relying heavily on this emergency source of funds. This can help to manage the overall money supply and inflationary pressures.

According to Deloitte (2023), before 2024, the NBE prioritized managing inflation and exchange rates by controlling the monetary aggregates, which was less successful. Recognizing the limitations of its prior strategy, the NBE in 2023 also signaled a potential shift towards an interest rate-based monetary policy framework. This approach could offer more precise control over inflation, allowing the NBE to adjust interest rates to influence borrowing and spending habits. Accordingly, on July 9, 2024, the National Bank of Ethiopia (NBE) adopted an interest-rate-based monetary policy regime, using the National Bank Rate (NBR) as its primary tool to influence monetary and credit conditions. The NBR, set initially at 15 percent, is the rate at which the NBE lends to commercial banks, aiming to affect borrowing costs and overall interest rates for consumers and businesses.

6.3.2. Money supply

Broad money supply has reached a substantial level of 2.17 trillion birr as of June 30, 2023. This significant increment, reflecting a 26.6% expansion from the prior fiscal year, is attributable to growth in both narrow money (M1) and quasi-money. In the fiscal year, narrow money supply increased by 20%, reaching 706 million birrs. This indicates some improvement in transaction-related demand for money in Ethiopia (Figure 6.1). Data presented in Table 6.1 show that an even more substantial rise of 29.9% was observed in quasi-money, which includes time and saving deposits on June 30, 2023, from 1.12 trillion birr in June 30, 2022. This growth can likely be attributed to enhanced deposit mobilization efforts by financial institutions (Table 6.1).

Table 6.1: Components of broad money supply (million ETB)

Year	Broad money (M2)	Narrow Money (M1)	Currency outside banks	Demand deposits	Quasi-money	Savings deposits	Time deposits
30-Jun-22	1,715,310	588,016	173,383	414,633	1,127,294	1,016,049	111,245
31-Dec-22	1,946,754	645,356	201,143	444,213	1,301,398	1,175,651	125,747
30-Jun-23	2,170,848	706,142	211,637	494,505	1,464,706	1,315,260	149,446
31-Dec-23	2,310,674	747,975	212,704	535,271	1,562,699	1,397,037	165,662

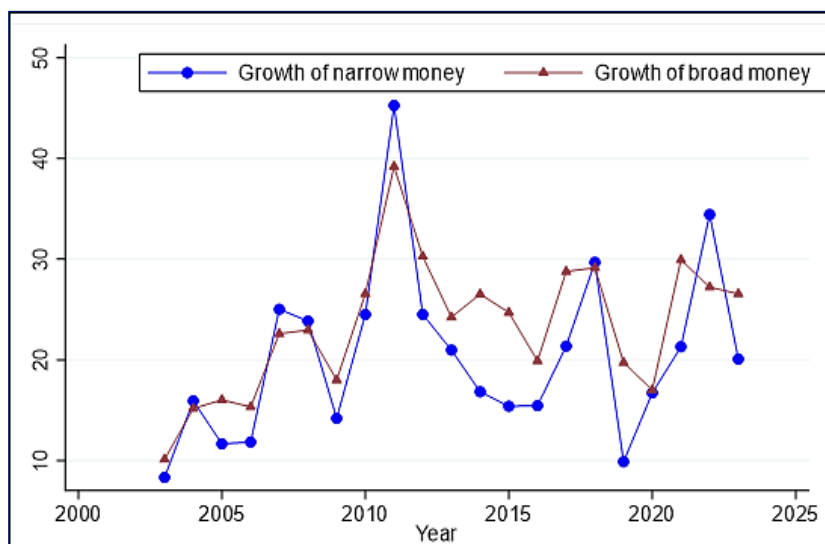
Source: Compiled from data in the NBE

Ethiopia's money supply witnessed notable growth in 2023. The holdings of currency by the public and demand deposits surged by 22% and 19.3%, respectively, contributing to the expansion of narrow money supply, a key measure of liquid money readily available for

spending. Furthermore, quasi-money, which reflects less liquid ones such as time deposits and savings deposits, also saw a significant rise. Time deposits and savings deposits specifically grew by an impressive 34.3% and 29.5%, respectively. These increments suggest Ethiopians' growing performance of deposits and preference for saving instruments (Table 6.1).

Over the past two decades, broad money supply growth has shown a fluctuating trend. It surged to a peak of 39.2% in 2010/11. Notably, the average growth rate between 1999/2000 and 2009/10 was significantly lower at 16.8%. The growth rate then climbed considerably to 25.3% on average between 2010/11 and 2021/22. These figures suggest a clear turning point in broad money supply growth around 2010 (Figure 6.1).

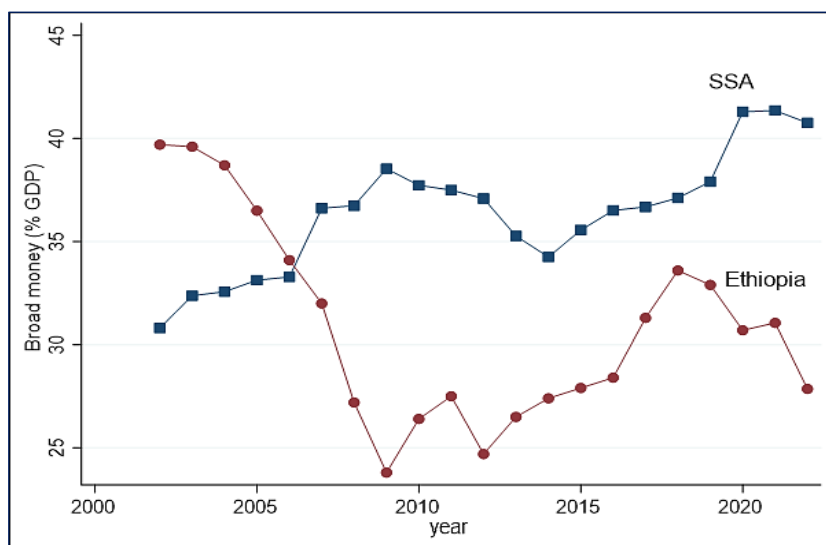
Figure 6.1: Growth rate of narrow and broad money supply (2001/02-2021/22)



Source: Computed from data in NBE

Broad money supply as a percentage of GDP has fluctuated over the years for both SSA and Ethiopia. On average, at 37.5%, SSA's broad money supply was higher than Ethiopia's (28.7%) since 2007. Ethiopia's broad money supply as a percentage of GDP started at 39.7% in 2002 and decreased steadily to 23.8% in 2008. It then rose to 27.9% in 2014 and continued to fluctuate slightly and stood at 27.86% in 2022 (Figure 6.2).

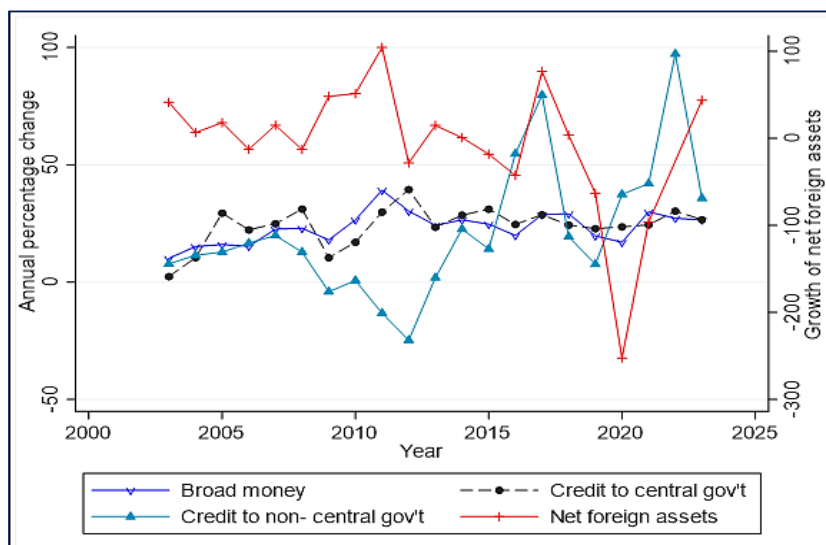
Figure 6.2: Broad money supply (% GDP) in Ethiopia relative to SSA



Source: Computed from data in the NBE and the World Bank

Domestic liquidity as measured by broad money supply continued to grow during the past two decades. Broad money supply increased to 2.17 trillion birrs in 2022/23, reflecting a 26.5% annual growth. According to the NBE's data, this growth was attributed to a 26.6% surge in domestic credit. The higher growth in domestic credit was attributed to a 35.7% increase in credit to the central government and 24% to the non-central government, respectively (Figure 6.3).

Figure 6.3: Trends of broad money supply and its determinants

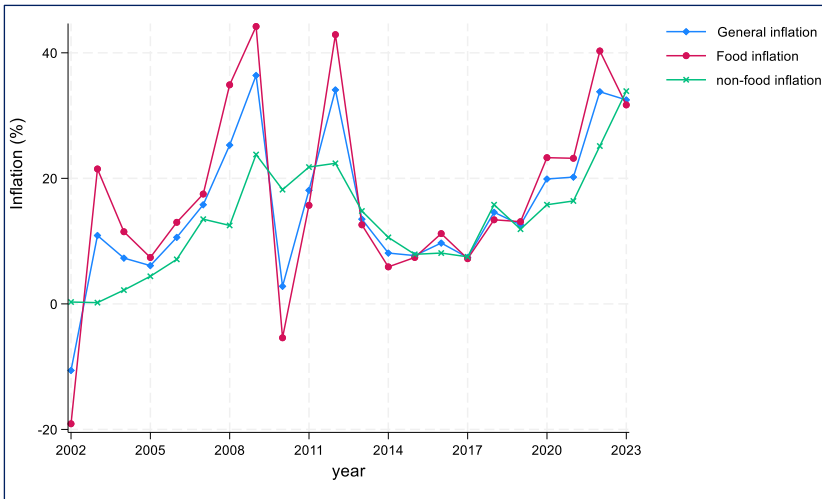


Source: Computed from data in the NBE

6.3.3. Inflation

Soaring inflation has emerged as a critical challenge for Ethiopia's macroeconomic stability in the past decade. On average, Ethiopia experienced an inflation rate of 14.49% across all categories (general, food, non-food) between 2002 and 2022. However, a closer look reveals a significant and positive trend – food inflation (averaging 16.27%) consistently outpaced the general inflation (14.49%) and non-food inflation (12.40%) during this period (Figure 6.4). The average difference between food and non-food inflation was 3.878%, suggesting that food prices tended to be more susceptible to fluctuations compared to non-food prices.

Figure 6.4: The trend of Headline, food, and non-food inflation

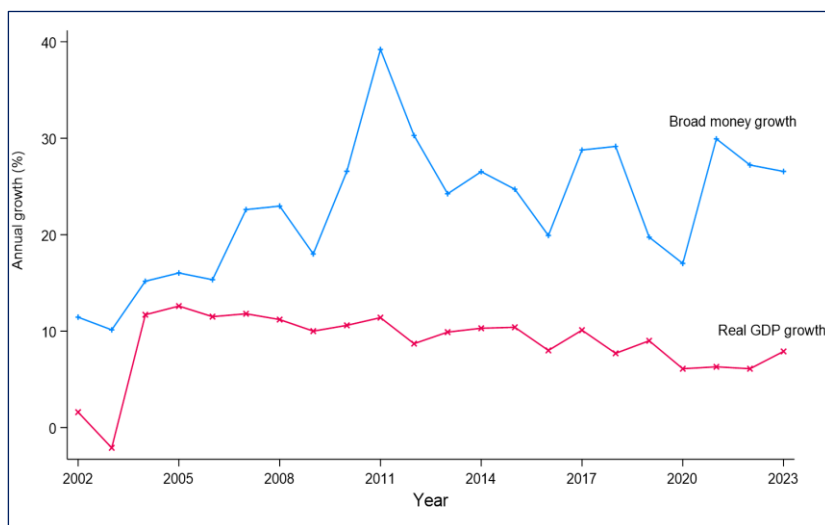


Source: Computed from data in the NBE

Inflation rates in Ethiopia exhibited significant fluctuations throughout the period (2002-2022) (Figure 6.4). The early 2000s were marked by both inflationary and deflationary periods, with a noteworthy instance of deflation in food prices during 2010. Around 2007 and 2008, on the other hand, the data suggests a sharp surge in inflation rates, likely linked to the global financial crisis. This period witnessed a peak in both headline inflation (36.4%) and food inflation (44.2%). Subsequently, a gradual decline in inflation rates was observed, albeit highly volatile. Recent years reveal a concerning trend – a renewed rise in inflation rates, making inflation a critical macroeconomic challenge for the country. From 20.2% in 2020/2021, inflation surged to 33.8% in 2021/2022. Food inflation displayed the most significant increment, reaching 40.3% in 2021/2022, reflecting a jump of 17.1 percentage points compared to 2020/21. Notably, non-food inflation witnessed a more moderate increment (8.75%) compared to food inflation.

The growth of the money supply has been consistently higher than the growth of real GDP in Ethiopia over the past two decades (Figure 6.5). A money supply growing faster than the real GDP is a significant risk factor for fueling inflation in Ethiopia. That is, when the money supply grows faster than real GDP, there are more birr chasing the same amount of goods and services in the economy. This creates an excess demand situation, possibly driving inflation upwards. However, the actual impact on inflation will depend on the interplay of other non-monetary factors affecting inflation in the country.

Figure 6.5: Growth of real GDP and broad money supply

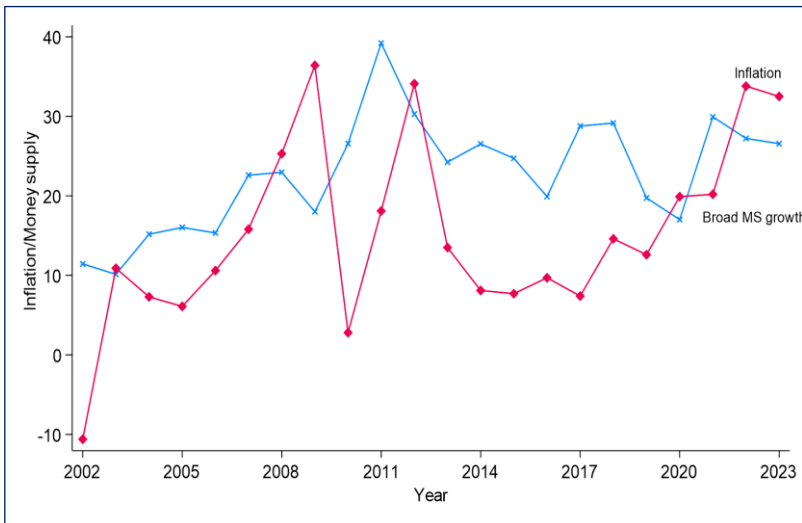


Source: Computed from data in the NBE

The money supply in Ethiopia is growing faster than the country's economic growth. This could fuel inflation in the country. Evidence suggests that the significant increment in money supply has been associated with a notable rise in the inflation rate during 2010/11 and 2011/12. At a peak of 34.1%, the headline inflation rate was significant in 2011/12. Moreover, food inflation peaked at about 43% in 2011/12

(Figure 6.6). This may appear to suggest that inflationary pressure in part is strongly linked to the expansionary monetary policy pursued in Ethiopia. A closer look at Figure 6.6 reveals that inflation has been responding to the broad money supply increment with some lags. Perhaps, the impact of money supply growth on inflation might not be immediate. This is because it might take some time for the increased money to circulate and affect the prices.

Figure 6.6: Inflation and growth of broad money supply



Note: 2002 denotes 2001/02 and 2022 denotes 2021/22

Source: Computed from data in the NBE

Table 6.2 shows that there is a weak correlation between the growth of broad money supply, headline, and food inflation in Ethiopia. Compared to headline and food inflation, non-food inflation appears to be strongly correlated with the growth of broad money. The strong correlation between non-food inflation and broad money growth in Ethiopia suggests a potential link between money supply and price

increases in non-food essential merchandise and utilities. This is also supported by Figure 6.7, which shows that non-food inflation moves in tandem with the growth of broad money supply.

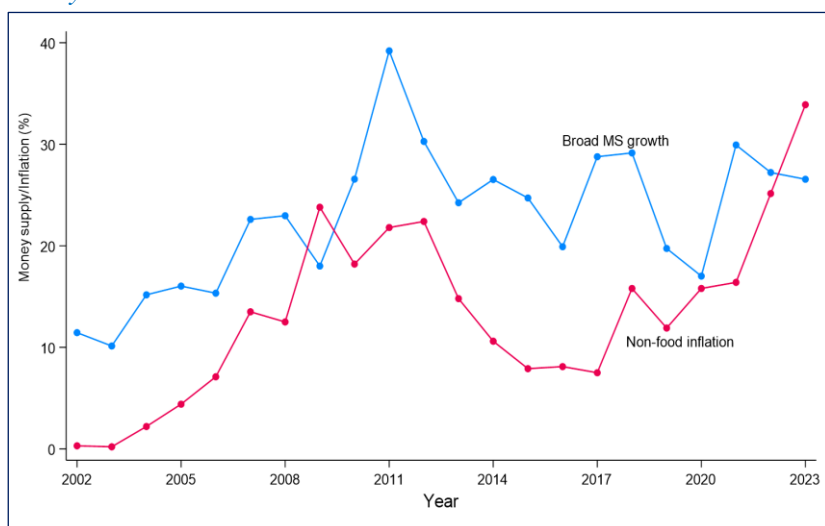
Table 6.2: Correlation between broad money supply and inflation

Variables	Growth of broad money	Headline inflation	Food inflation	Non-food inflation
Growth of broad money	1			
Headline inflation	0.41	1		
Food inflation	0.267	0.9741*		
Non-food inflation	0.79*	0.8020*	0.6513*	1

*Denotes significance at a 5% level

Source: Computed from data in the NBE

Figure 6.7: Co-movement of non-food inflation and growth of broad money



Source: Computed from data in the NBE

The money supply increment in the country, which is often inflationary, may take the form of deficit financing or monetization of deficits. The "monetization of deficits" increases the money supply without a corresponding rise in production, leading to inflation. In this regard, recent internal and external shocks such as COVID-19 and conflicts might have necessitated relaxed fiscal and monetary policies (NBE, 2023), but such measures come with inflationary risks.

While this chapter does not investigate the underlying drivers of inflation, several recent studies highlight key internal and external factors driving price increases. In addition, droughts, ongoing violence, and internal conflicts significantly disrupt Ethiopia's supply chains, pushing prices upward (Degye et al., 2022; Deloitte, 2023). The other critical factors fueling inflation were the foreign exchange shortages, Birr depreciation, black market premiums exceeding 100%, and import pricing based on black market rates all contribute to inflation. Expensive imports fueled by these factors exacerbate the problem. Imported inflation is also driving inflation in Ethiopia. As a net importer, Ethiopia is particularly vulnerable to global price surges like those recently seen in fuel, fertilizer, and food (NBE, 2023; Deloitte, 2023). These external cost-push factors add to domestic inflationary pressures.

Overall, Ethiopia's current high inflation is the combined result of internal and external factors. It reflects the policy choices made by the country. The public-investment-driven growth approach, coupled with loose monetary and fiscal policies, has contributed significantly (United Nations Development Program (UNDP), 2024). Heavy reliance on domestic borrowing and monetization of deficits further fueled inflation. It is also linked with a depreciation of the Birr, and foreign exchange shortages, which exacerbated the problem, making imports more expensive. Along with external pressures and shocks in the form

of global price surges, domestic supply chain disruptions that further restricted essential goods have been pushing prices even higher.

Reducing inflation has been a top priority for Ethiopian policymakers due to its negative impact on the country's macroeconomic stability over the past decade. Addressing this complex issue requires a comprehensive strategy that addresses both internal policy choices and external vulnerabilities. In its recent monetary policy statement released in August 2023, the National Bank of Ethiopia (NBE) acknowledged the multifaceted nature of inflation and outlined measures to curb it. The policy mix includes capping credit growth, increasing the NBE's emergency lending rate to commercial banks, and limiting the government's direct borrowing from the Bank.

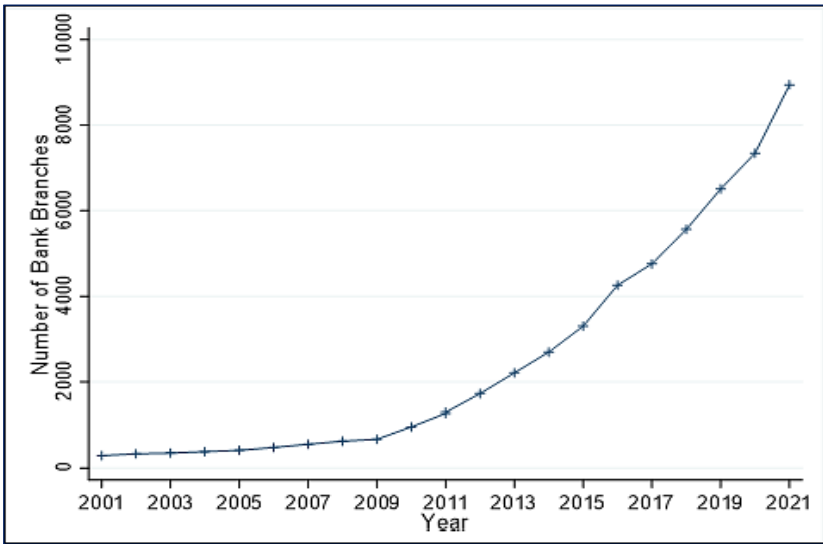
6.4. Developments in the Financial Sector

6.4.1. *Access to financial institutions*

In Ethiopia, the number of commercial banks has reached 32 in 2023/24. Of this, 30 are privately owned and two (Commercial Bank of Ethiopia and Development Bank of Ethiopia) are state-owned. The number of banks increased over the past two decades from only 8 in 2001/02 to 32 in 2023/24.

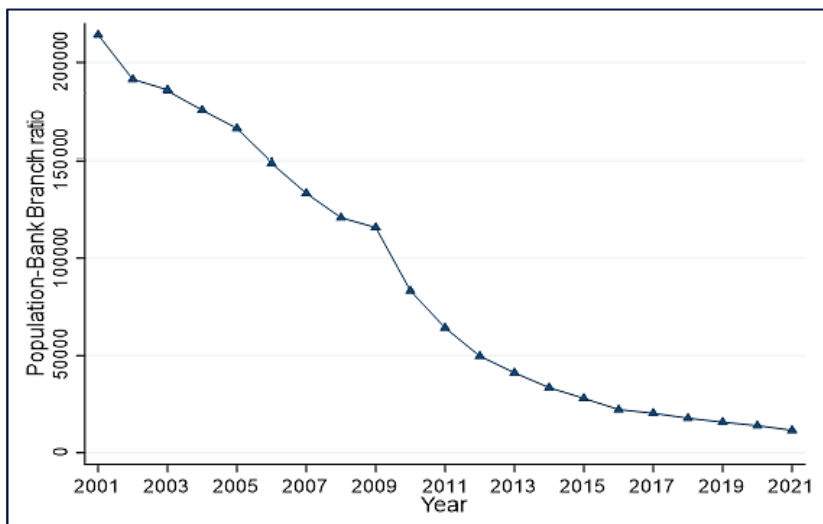
According to Figure 6.8, the number of bank branches in Ethiopia has increased five times since 2012/13 and 30 times since 2001/02, with a total of 8,944 branches recorded in 2021/2022. More recently, the total number of bank branches increased from 7,344 in 2020 to 8,944 in 2021 due to branch expansion and the entry of new banks, including interest-free banks, into the industry.

Figure 6.8: Number of bank branches in Ethiopia



Source: Computed from data in the NBE

Generally, there is improved access to financial institutions in the country. The banking access rate tends to improve over time even when the size of the population is considered. Figure 6.8. shows that the expansion of the banking branches or networks has improved between 2012 and 2021. In 2001/02, there was one bank branch for 214,237 people. Through gradual improvement, the population-to-bank branch ratio reached 11,516 people per branch in 2021/22. Despite the concentration of banks in urban areas, this indicates a successive increment in the number of bank branches available to every 1000 adults in the country. In other words, the declining population-to-bank branch ratio signals an enhanced banking access rate over the past two decades.

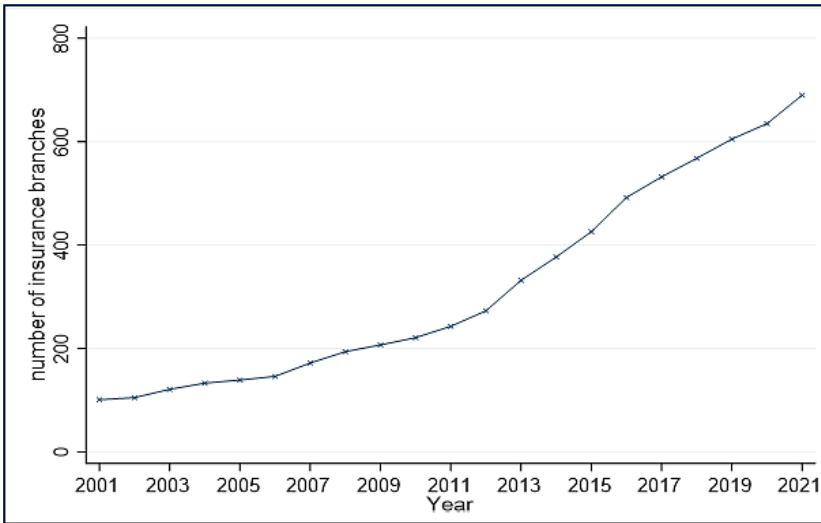
Figure 6.9: Population-bank branch ratio in Ethiopia

Source: Computed from data in the NBE

In Ethiopia, the number of insurance companies increased to 18 in 2023/24. Of this, 17 are private insurers. In terms of number, insurance companies doubled over the past two decades from only nine in 2001/02 to 18 in 2021/22. Figure 6.10 demonstrates that in line with the increment in the number of insurance companies, their branches also increased by about seven times in 2021/22 from 101 in 2001/02 to 690. This recent increment is due to the opening up of 55 new insurance branches in 2021/22.

NBE's data also suggests growth in the number of microfinance institutions (MFI). From 2001/02 to 2021/22, the number of MFI increased from 21 to 43. Figure 6.11 depicts the doubling of MFIs over the past two decades (Figure 6.11).

Figure 6.10: Number of insurance branches

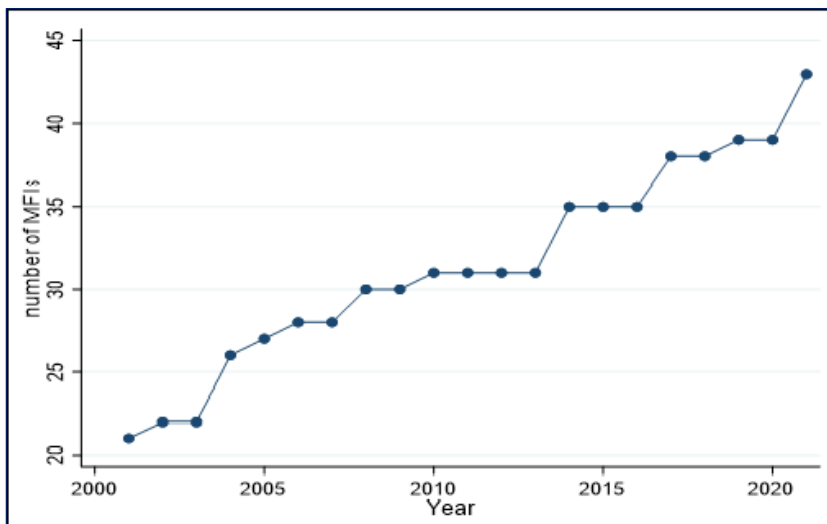


Source: Computed from data in the NBE

The overall increment in the financial institution's network is also evidenced by the improvement in the financial institution's access index. According to the IMF's financial institution's access index data¹¹, there was a gradual increment in the access index value in Ethiopia over the years. Between 2000 and 2008, the index value was 0.01, which slightly increased to 0.02 between 2009 and 2011. This is likely related to the significant expansion in bank branches since 2009 as indicated in Figures 6.8 and 6.9. From 2012 to 2021, the index value showed a steady growth, reaching 0.04. This shows that access to financial institutions and services is improving in Ethiopia (Figure 6.12).

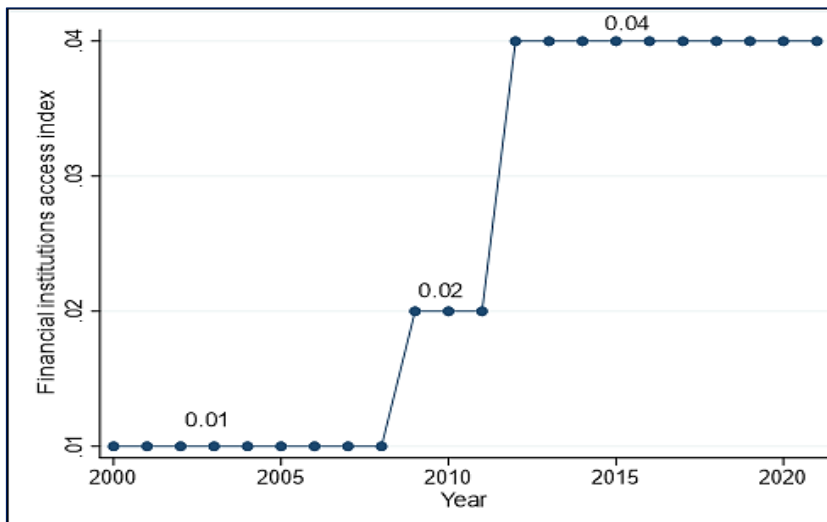
¹¹ The IMF's Financial Institutions Access Index (FIA) is part of the Financial Development (FD) index. FIA measures the number of bank branches and ATMs per 100,000 adults.

Figure 6.11: The number of MFI in Ethiopia



Source: Computed from data in the NBE

Figure 6.12: Index of access to financial institutions in Ethiopia



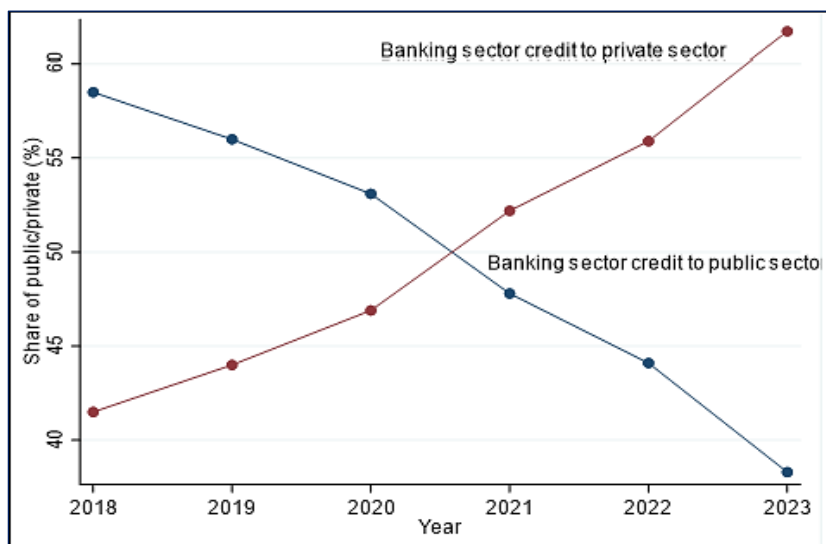
Source: Computed from data in the IMF (2024)

6.4.2. Credit

6.4.2.1. Role of the banking industry

The banking sector plays a key role in the Ethiopian economy. Among other roles, it is of high importance in terms of financing the development of the country through the provision of credits. Figure 6.13 shows that there is a shift in the loan portfolio of the banking sector. In 2018, 58.5% of the credit was channeled to the public sector while the private sector received the remaining 41.5% of the credit facilities. Perhaps, before 2021, the public sector had been receiving more than half of the banking sector's credit. Since 2021, however, total banking sector credits to the private sector have exceeded loans to the public sector (Figure 6.13).

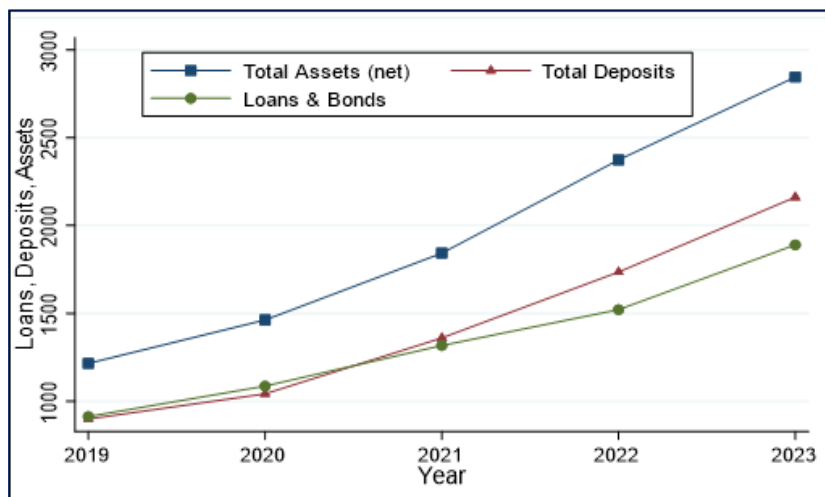
Figure 6.13: Distribution of banking sector credit (% of total credit) (2018-2023)



Source: Computed from data in the NBE

Ethiopia's commercial banking sector experienced significant growth in 2023. According to the NBE's data, by June 2023, total assets reached ETB 2,845.9 billion, reflecting a year-on-year increment of approximately 20%. This growth is primarily driven by loans, advances & bonds, which collectively make up a significant portion (66.4%) of total assets (Figure 6.14).

Figure 6.14: Bank assets, loans & bonds, and deposits (billion ETB)



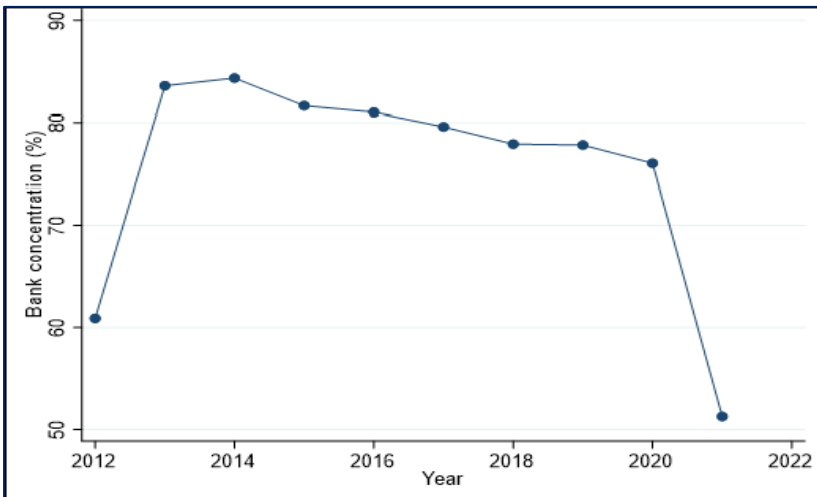
Source: Computed from data in the NBE

According to the NBE (2024) report, the financial sector continued to be dominated by the banking sector, whose total assets accounted for 96.3% of total financial sector assets at the end of June 2023. While the banking sector dominates the assets of financial institutions, the banking sector's assets are also dominated by a few banks. Bank concentration (%) measures the assets of the three largest commercial banks as a share of total commercial banking assets. The banking industry in Ethiopia is mainly controlled by a small number of state-owned commercial banks—CBE and DBE. According to the Global

Financial Development report by the World Bank, the bank concentration index has risen from 61% in 2012 to 76% in 2020, but it dropped to 51.3% in 2021. This may be linked to the industry's growing entry of new banks.

It should be noted that the banking system in Ethiopia is still highly concentrated despite a declining trend compared to Kenya. In 2020, the three biggest banks in Ethiopia held more than 76% of all commercial banking assets, whereas Kenya's top three banks held only 42.7% during the same period (Figure 6.15).

Figure 6.15: Bank concentration in Ethiopia



Source: Computed from data in the World Bank

6.4.2.2. Loan disbursement

Looking at the sectoral distribution, Table 6.3 shows that the private sector has consistently been the largest recipient of disbursements in the last two years, followed by public enterprises and cooperatives. In 2022/23, the private sector received over 84% of total disbursements. The disbursements show a mixed trend across different client types over time.

Table 6.3: Loan disbursement by clients (in millions of ETB)

Client type	First five months of 2021/22	First six months of 2022/23	2022/23	First six months of 2023/24	Annual change in 2022/23	Annual change in 2023/24
Total disbursements	146,849.3	311,114.9	547,676.7	218,693.8	111.9	-29.7
Public enterprises	50,215.8	29,292.8	75,801.5	50,867.9	-41.7	73.6
Cooperatives	13,082.6	6,079.0	9,751.2	1,109.2	-53.5	-81.8
Private sector	83,551.0	275,743.0	462,124	166,716.6	230	-39.5

Source: Computed from data in the NBE

At 111.9%, total disbursements have seen the largest increase in 2022/23. This increment has been due to the astounding growth of loans to the private sector by 230%. On the other hand, disbursements declined by 29.7% in the first six months of 2023/24 compared to 2022/23. Disbursements to public enterprises fluctuated over the years. There was a 41.7% drop in the first six months of 2022/23 compared to the same period of 2021/22. However, disbursements have increased by 73.6% from the first six months of 2022/23 to the first six months of 2023/24. This growth is remarkable amidst the credit limit introduced in August 2023 by the NBE.

Over the years, there has been a significant decrease in loan disbursements to cooperatives. In the first six months of 2023/24, there was an 81.8% drop in loan disbursements compared to the same period of 2022/23. On the other hand, loan disbursements to the private sector have shown a significant increment over the years. There was a 230% increase in disbursements from the first five months of 2021/22 to the

first six months of 2022/23. However, disbursements to the sector have declined by 39.5% in the first six months of 2023/24 compared to the same period of 2022/23.

Table 3 demonstrated that except for public enterprises, there has been a drop in loan disbursements as a whole and to various sectors in 2023/24, owing to the credit limit introduced by the NBE in August 2023. In summary, disbursements to the private sector have shown a significant and consistent increment, while disbursements to cooperatives have fluctuated or decreased over the years.

6.4.2.3. Credit Allocation in the Banking Industry: A Shifting Landscape

According to the NBE's (2024) Financial Stability Report, the banking sector's loans and advances are concentrated in the hands of a few large borrowers. The top ten borrowers from the banking industry held 23.5% of total loans and advances of the banking industry at the end of June 2023, a considerably higher share than a year earlier (18.7%). However, the report escaped, uncovering the details of the borrowers.

In 2023, the top three sectors with the highest share of loans were manufacturing, domestic trade and services, and export. While manufacturing still accounted for the largest share of credit (23.2%) from Ethiopian banks by the end of June 2023, the importance of domestic trade and services increased, growing by 3.8 percentage points to 20.7% (Table 6.4). This increment in loans to domestic trade and services suggests that there has been a rise in domestic demand for credit financing due to the government's import substitution policy and that banks are looking toward domestic businesses due to issues in the global market (NBE, 2024).

Table 6.4: Value and share of banking loans by sector (billion ETB)

Sector	2022		2023		
	Amount (billion ETB)	Share (%)	Amount (Billion ETB)	Share (%)	Growth (%)
Agriculture	43.4	4.2	83.7	6.4	92.8
Building & Construction	115.9	11.3	132.3	10.1	14.15
Manufacturing	260.7	25.3	304.6	23.2	16.8
Import	118.3	11.5	99.3	7.6	(16.06)
Export	176.4	17.1	205.4	15.7	16.43
Domestic Trade & Services	173.8	16.9	270.9	20.7	55.86
Staff & Consumers	90.7	8.8	138.2	10.5	52.4
Other businesses	50.4	4.9	76.5	5.8	51.8
Total	1029.6	100	1311.0	100	27.3

Source: Compiled from data in the NBE (2024)

Total credit extended to various sectors grew by 27.3% in 2023, compared to 2022. Despite its importance in the country's economy, agriculture receives the least credit, indicating marginalized access to credits. Despite being relatively smaller in magnitude, the growth of loans to the agricultural sector (92.8%) has been substantial, followed by domestic trade and services. On the other hand, Table 6.4 shows a 16% drop in loans for import-related activities, likely due to limited access to foreign exchange through official banking channels, which discourages importers from applying for loans.

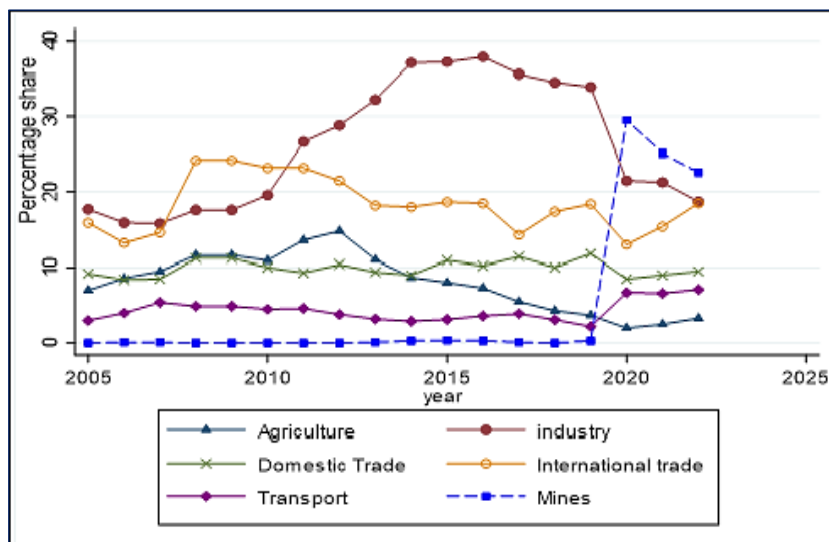
An analysis of the share of credit allocation across economic sectors from 2005 to 2022 reveals distinct patterns (Figure 6.16). Three sectors consistently emerged as the top recipients: industry, international trade, and construction. The industrial sector remains the dominant player, consistently capturing the largest credit share, ranging from 15.8% in 2005 to 37.9% in 2022. This suggests a strong emphasis on industrial development within the Ethiopian economy. International trade follows closely, though its credit allocation exhibits more volatility. After peaking at 24.2% in both 2008 and 2009, it declined to 13% by 2018, before recovering slightly in 2022. This pattern might reflect fluctuations in international trade activity, the availability of foreign exchange that determines the demand for imports, or government policies impacting imports and exports. The construction sector holds the third position, with credit allocation fluctuating between 7.6% and 13.2%. After a period of decline, it experienced a temporary rise in 2020, before declining again in 2022.

The other striking feature in the country's credit allocation landscape is the rise in the share of the mining sector. The analysis reveals a dramatic shift in credit allocation to the mining sector since 2020. The mining sector, previously receiving a minimal credit (maximum of 0.3% pre-2020), experienced a surge of 29.5% before settling at 22.6% in 2022. This warrants further investigation into the reasons behind this significant increase. Possible explanations could include government policy that prioritizes investment in mining, promoting mineral development, or a surge in global mineral prices.

In contrast, agriculture, a crucial sector of Ethiopia's economy, shows a concerning downward trend in the post-2012 period. Credit allocation peaked at 14.8% in 2012 but plummeted to a low of 2.0% by 2020. It showed a modest recovery in 2021 and 2022. This decline highlights an uneven distribution of credit, with limited access to rural areas and

agricultural activities. Domestic trade credit, on the other hand, remained relatively stable throughout the period, generally below 12% (Figure 6.16). This suggests a different trend compared to the volatile credit allocation in mining and the declining allocation in agriculture.

Figure 6.16: Share of economic sectors in credit



Source: Computed from data in the NBE

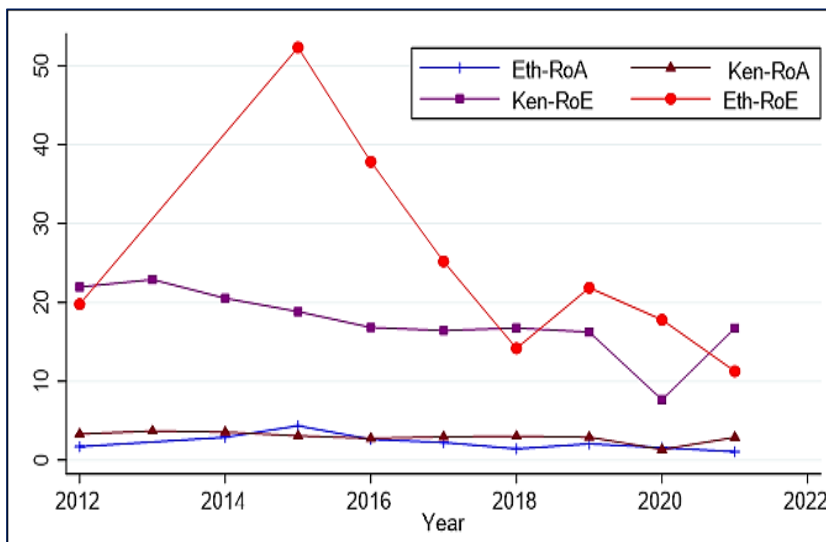
6.5. Profitability and Efficiency of the Banking Industry

6.5.1. Return on assets and return on equity

A key indicator of profitability, Return on Assets (ROA), measures a commercial bank's ability to generate profit from its assets. In Ethiopia, the average ROA stood at 2.3% between 2012 and 2021. However, a concerning downward trend emerged, with RoA dropping from 1.72% in 2012 to about 1% in 2021 (Figure 6.17). This decline suggests a potential reduction in the banking sector's overall profitability. For comparison, the average RoA for Kenyan banks during the same period

hovered near 3%, highlighting a significant disparity in the profitability of the sector between the two nations.

Figure 6.17: RoE and RoA in Ethiopia and Kenya

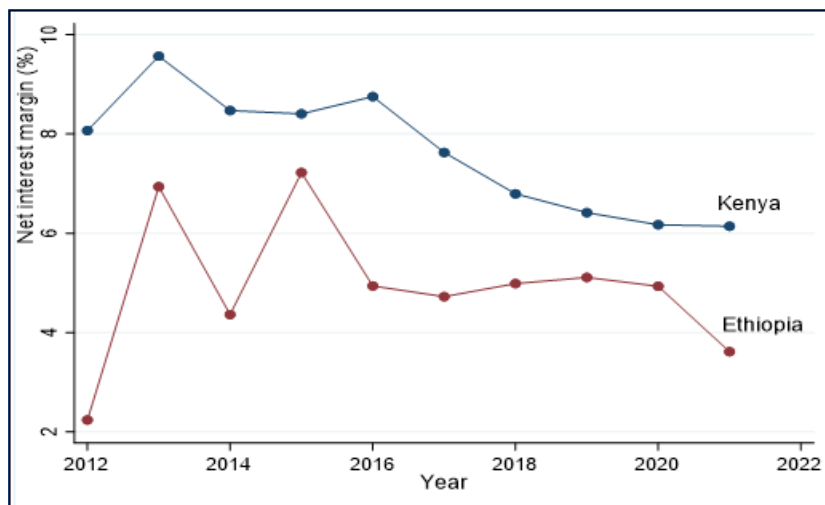


Source: Computed from data in the World Bank

Like Return on Assets (RoA), Return on Equity (RoE) gauges a bank's profitability relative to the shareholder's equity. While Ethiopian banks RoE averaged 25% between 2012 and 2021, a cause for concern lies in its volatility. The RoE dropped significantly, plummeting from 18% in 2012 to just 11.3% by 2021. While Kenya's average RoE remained at 17.5%, it also experienced a decline from 22% to 16.7% during this period (Figure 6.17). Overall, these trends in both RoA and RoE collectively paint a picture of declining profitability within Ethiopia's banking sector. It's important to note, however, that evidence from the NBE (2024) suggests profitability has decreased but is viewed to be sufficient.

Bank net interest margin (%) is a measure of the accounting value of a bank's net interest revenue as a share of its average interest-bearing (total earning) assets. In contrast to profitability measures, the bank's net interest margin (NIM) presents a different perspective. This metric reflects the difference between interest earned on assets and interest paid on liabilities, expressed as a percentage of total earning assets. Unlike RoA and RoE, Ethiopia's NIM saw an upward trend, rising from 2.2% in 2012 to 3.6% by 2021 (Figure 6.18). This signifies an improvement in the value Ethiopian banks extract from their interest-bearing assets. Kenya's NIM followed a downward trajectory, dropping from 8% to 6.14% during the same period. While Kenya's average margin remains higher, the narrowing gap suggests a potential shift in the landscape.

Figure 6.18: Bank net interest margin in Ethiopia and Kenya



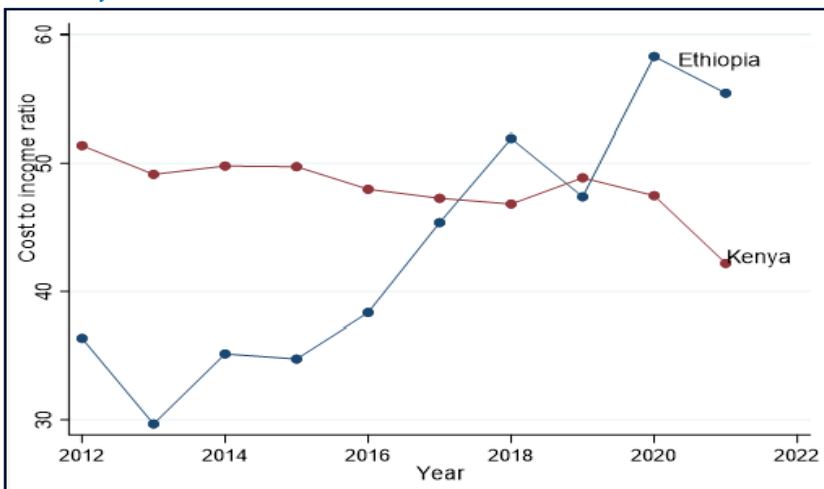
Source: Computed from data in the World Bank

6.5.2. Efficiency of the banking sector

Aside from profitability, the banking sector's efficiency is also assessed. Two key metrics shed light on efficiency: the cost-to-income ratio and overhead costs-to-total assets ratio of banks. Both indicators, despite differing scales, paint a concerning picture of declining efficiency in the Ethiopian banking sector over the past decade.

The bank cost-to-income ratio, which measures operating expenses as a percentage of the total income, has risen steadily in Ethiopia. It climbed from 36.4% in 2012 to 55.4% by 2021 (Figure 6.19). A higher cost-to-income ratio indicates that a bank is less efficient in managing its expenses. Accordingly, this stark rise signifies a significant decline in operational efficiency. Conversely, Kenya's banking sector cost-to-income ratio tells a different story. It has steadily decreased from 51.4% in 2012 to 42.2% in 2021, indicating an improvement in the Kenyan banks' efficiency. This comparison further underscores the concerning trend in the overall efficiency of Ethiopia's banking sector.

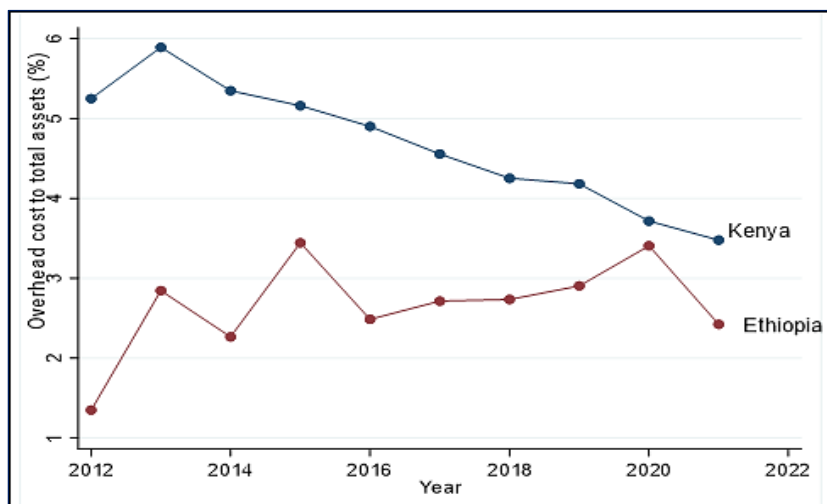
Figure 6.19: Cost-to-income ratio of the banking sector in Ethiopia and Kenya



Source: Computed from data in the World Bank

Another metric reflecting the banking sector's efficiency is the bank overhead costs to the total assets ratio. This ratio expresses a bank's operating expenses as a percentage of its total assets¹². While the Ethiopian average for this ratio stood at 2.65% between 2012 and 2021, a cause for concern lies in its upward trend. The ratio climbed from 1.4% in 2012 to 2.4% in 2021 (Figure 6.20). This signifies a rise in operating expenses relative to asset holdings, suggesting a decline in overall industry efficiency. Interestingly, the Kenyan banking sector presents a contrasting picture. Their average overhead cost ratio was significantly higher at 4.7% during the same period, but it exhibited a downward trend, suggesting improvement in efficiency. Kenya's ratio dropped from 5.2% in 2012 to 3.5% in 2021. This comparison highlights the potential for improvement in Ethiopia's banking sector.

Figure 6.20: Bank overhead costs to total assets in Ethiopia and Kenya

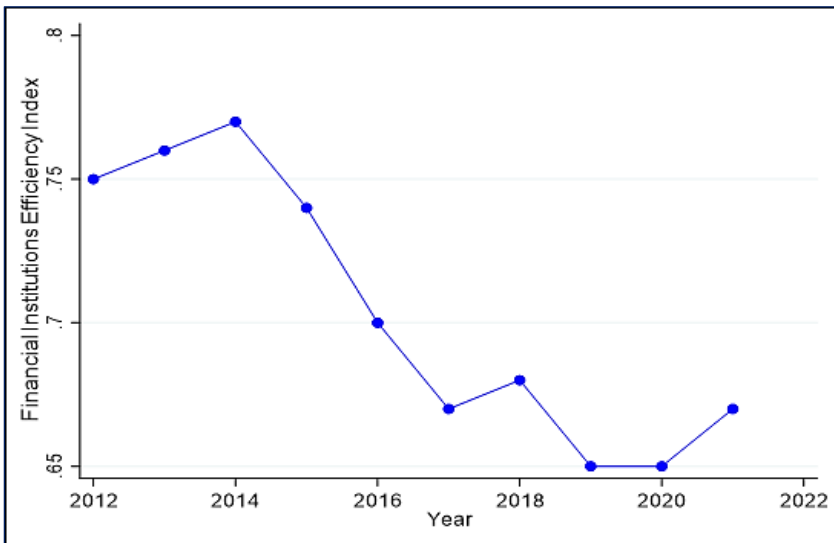


Source: Compiled from data in the World Bank's Global Financial Development data

¹² Total assets include total earning assets, cash and due from banks, foreclosed real estate, fixed assets, goodwill, other intangibles, current tax assets, deferred tax assets, discontinued operations, and other assets.

To strengthen the analysis of individual profitability and efficiency indicators, data from the International Monetary Fund's (IMF) Financial Institutions Efficiency Index (FIE) is incorporated. This comprehensive index considers various aspects of financial health, including profitability (net interest margin, return on assets, and return on equity), cost management (overhead costs to total assets), and income diversification (non-interest income to total income). The FIE data paints a concerning picture, revealing a decline in the overall efficiency of Ethiopian financial institutions from 0.75 in 2012 to 0.67 in 2021. This trend aligns with the findings from the separate efficiency indicators, further emphasizing the need to address potential shortcomings within the system (Figure 6.21).

Figure 6.21: Financial institutions efficiency index



Source: Computed from data in the IMF

6.6. Financial Inclusion

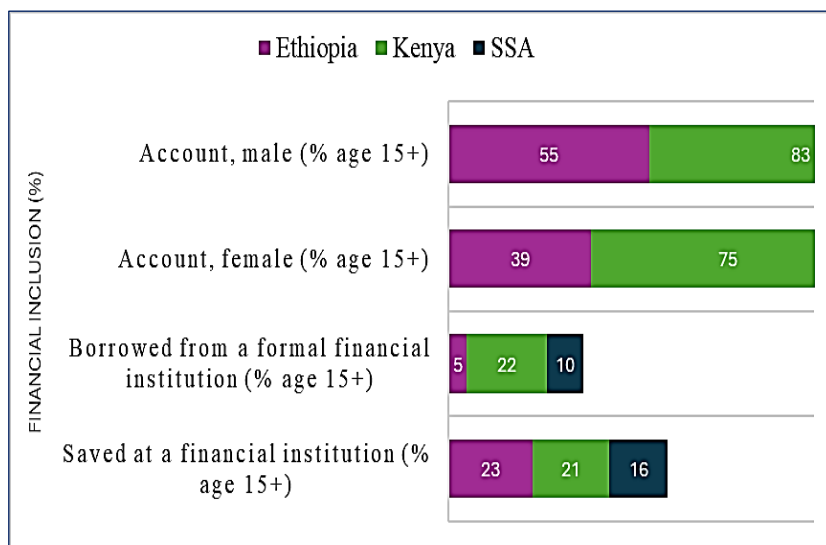
Financial inclusion/exclusion shows the degree to which individuals have or lack equal access to opportunities offered by financial institutions (FI) (Morsy and Youssef, 2017). Progress in Ethiopian financial inclusion leaves many behind. While Ethiopia has made strides in expanding financial inclusion, a significant portion of the population remains unbanked. According to the World Bank's (2022) Findex data, in 2022, only 46% of adults had a transaction account, highlighting the ongoing challenge in financial inclusion. This number has grown from 35% in 2017 and 22% in 2014, demonstrating some positive movement (Table 6.5). However, this progress falls short of the ambitious target set by the government's National Financial Inclusion Strategy (NFIS) launched in October 2017. The NFIS aimed to achieve a much higher target of 60% of adults having a transaction account by 2020.

Moreover, Ethiopia lags behind regional benchmarks in financial inclusion. Ethiopia's financial inclusion progress, while showing improvement, falls short of its regional peers (Figure 6.22). Despite reaching 46% of adults with transaction accounts in 2022, Ethiopia lags behind neighboring countries like Kenya, where 79% of adults have accounts. Additionally, the national average falls below the SSA region's overall rate of 55% (Table 6.5). According to the World Bank's (2022) Findex data, 86% of unbanked adults reported "insufficient funds" as the main reason for not having a bank account. This suggests that low-income populations do not see the value or relevance of financial services in their lives. Other reported barriers to financial inclusion include long distances to access a financial institution and lack of identity documentation (ID) to register for bank accounts, cited by 33% and 29% of adults surveyed, respectively. In general, Ethiopians with lower levels of education, unemployment, and lower income are less likely to have a bank account.

Table 6.5: Financial Inclusion in Ethiopia

Year/ Country	Adults saving at FI (%)	Adults borrowed from a FI (%)	Adults that saved any money (%)	Saved using other means (%)	Adults borrowed any money (%)	Adults that borrowed from	Adult account ownership (%)	Account, female (% age 15+)	Account, male (% age 15+)
<i>Ethiopia</i>									
2014	14	7	48	30	44	29	22	21	23
2017	26	11	62	38	41	31	35	29	41
2022	23	5	53	30	39	30	46	39	55
<i>Kenya</i>									
2014	30	16	76	40	79	60	75	71	79
2017	27	19	70	35	64	45	82	78	86
2022	21	22	67	32	76	54	79	75	83
<i>SSA</i>									
2014	16	7	60		55	42	34	30	39
2017	15	8	54		46	31	43	37	48
2022	16	10	56		56	41	55	49	61

Source: Computed from data in the World Bank

Figure 6.22: Selected indicators of financial inclusion (%), 2022

Source: Computed from data in the World Bank

Ethiopia's progress in financial inclusion reveals a mixed picture. While the overall proportion of adults who saved money has increased (53% in 2022), a concerning decline is evident in formal account usage and borrowing. In 2022, only 23% of adults saved money at financial institutions, a drop of 3 percentage points from 2017 (26%). Similarly, borrowing through banks witnessed a significant decrease, with just 5% of adults utilizing this service in 2022 compared to 11% in 2017. Despite this decline, Ethiopian adults saving at financial institutions remain somewhat better than the regional average and that of Kenya. This suggests Ethiopians might be saving through informal channels outside the formal banking system (Table 5).

There is a reduction in account usage (saving) and borrowing among adults in Ethiopia. In 2022, only 23% of adults have saved at the financial institutions, declining by 3 percentage points as compared to 26% in

2017, and only 5% borrowed from financial institutions relative to 11% in 2017. Regarding saving at financial institutions, Ethiopia's standing is somewhat better than the regional average and that of Kenya.

Ethiopia's financial inclusion data reveals surprising evidence that Ethiopians overwhelmingly favor informal financial mechanisms. Despite over half (53%) of the adults saving money in 2022, only a fraction (23%) utilizes formal institutions like banks. The majority, 30%, rely on informal saving methods like Iqub or saving with individuals outside their family. This trend extends to borrowing as well. While 39% of Ethiopians borrowed money, a mere 5% accessed loans from financial institutions. The remaining 30% was borrowed from family and friends. This may reveal that obtaining finance through formal financial institutions is a significant challenge, as they may require collateral. Furthermore, access to formal credit through financial institutions has declined significantly. The proportion dropped from 11% in 2017 to a concerning 5% in 2022, falling below the regional average. That is, as few as one in twenty are active borrowers from financial institutions (Table 6.5). This highlights the limited reach of formal financial services in Ethiopia and the lack of access to credit facilities. This is also related to the level of development of the financial sector. According to the World Bank (2019), Ethiopia's credit markets are relatively underdeveloped compared to other neighboring countries. This is a result of several binding constraints, including a lack of appropriate collateral that micro, small, and medium enterprises (MSMEs) can pledge for loans, and underdeveloped credit infrastructure systems such as a modern collateral registry, secured transactions framework, and credit reporting system.

The World Bank's Findex data also reveals that the gender gap is widening. While Ethiopia has seen progress in overall financial inclusion, a troubling trend emerges when examining gender disparity. Women are disproportionately impacted by the lack of access to

financial services. The gender gap in account ownership has widened significantly. In 2014, it was negligible, but by 2022, it had increased significantly to 16%. This widening gap is starkly evident when looking at individual account ownership rates. While account ownership among men has more than doubled since 2014, rising from 23% to 55%, women's access has lagged. In 2022, only 39% of women had an account, compared to 55% of men. This means nearly two-thirds of Ethiopian women remain unbanked, despite a general improvement in financial inclusion over the past decade. The evidence indicates that in Ethiopia, women face a disproportionate impact from financial exclusion, with a significant gender gap in accessing banking, savings, and credit services (Table 6.5).

There is also a large urban-rural divide in access to financial services in Ethiopia. World Bank's Ethiopia Living Standards Measurement Survey (LSMS 2018–2019) reported a rural-urban gap in financial inclusion, with 59% of urban versus 18% of rural adults reporting having a bank account. Financial inclusion is more prevalent in urban areas than in rural areas due to the concentration of formal financial services in larger towns and the capital city of Ethiopia (Desalegn and Yemataw, 2022). Moreover, this unequal pace of financial inclusion can partly be attributed to the lack of financial access points in rural areas. Using the 2018/2019 ESS Survey, Achew *et al.* (2021) reported that the average distance to a financial access point for rural dwellers is 15 km compared to an average of 1 km distance for an urban resident. In some regional states like Somali, the residents must travel up to 42 km to reach an access point.

6.7. Digital Finance

Digital finance refers to the use of technology to deliver financial services. It's essentially the transformation of traditional banking and financial services through digital tools and products. Ethiopia has made

considerable progress in this regard. The proportion of adults who received wages in bank accounts has risen from 17% in 2017 to 44% in 2022. Likewise, the proportion of adults who paid utility bills using an account also increased from a meager 0.2% in 2021 to 18% in 2022. Despite this progress, about 82% of adults still pay utility bills using cash, compared to only 13% of people in Kenya and 54% in the SSA region (Table 6.6).

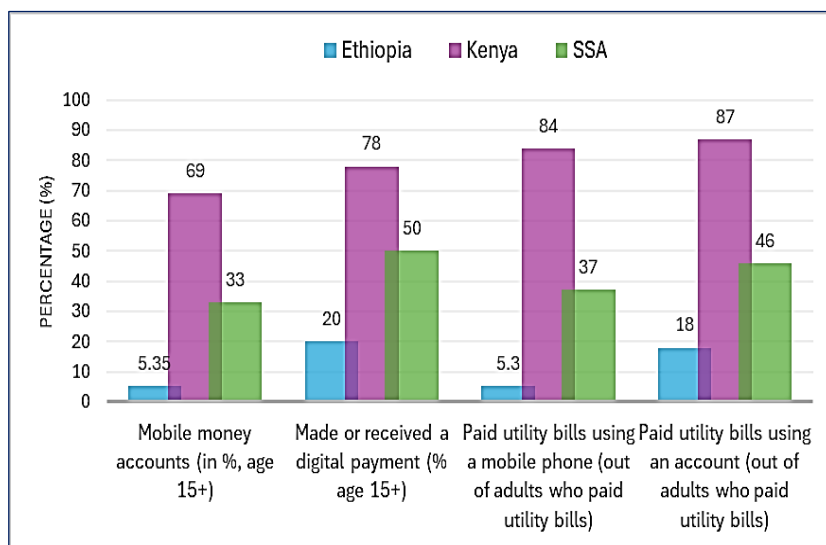
Table 6.6: Usage of digital financial services in Ethiopia, Kenya, and SSA

Variables	2017			2022		
	Ethiopia	Kenya	SSA	Ethiopia	Kenya	SSA
Mobile money accounts (in %, age 15+)	0.41	73	21	5.35	69	33
Made or received a digital payment (% age 15+)	12	79	34	20	78	50
Debit card ownership (% age 15+)	4	38	18	11	22	24
Paid utility bills using a mobile phone (out of adults who paid utility bills)	0	82	23	5.3	84	37
Paid utility bills using an account (out of adults who paid utility bills)	0.2	85	31	18	87	46
Received wages into an account (out of adults who received wages)	17	68	45	44	78	59
Received payments for agricultural products into an account (out of adults who received agri. payments)	1.1	46	-	1.8	63	-

Source: Computed from data in the World Bank

Ethiopia falls short in digital financial services relative to regional peers and the SSA average (Figure 6.23). Kenya's performance in digital financial services (DFS) is exceptionally good relative to Ethiopia and the SSA average. For instance, in Ethiopia, only 20% of adults made or received digital payments in 2022. On the other hand, the comparative figure for Kenyan and SSA stood at 78 and 50%, respectively. That is, a considerable proportion of the population (80%) rely on cash to pay and receive payments. Ethiopia is an outlier among its peers regarding access to and usage of DFS. This suggests that Ethiopia has not taken advantage of DFS that have driven access to and usage of financial services in SSA.

Figure 6.23: Selected indicators of digital financial services (2022)



Source: Computed from Findex data in the World Bank (2023)

Ethiopia has a low uptake of digital financial services (DFS): just 5.35% of Ethiopians had mobile money accounts in 2022, compared with 33% on average across SSA countries and 69% for Kenya. Moreover,

Ethiopia's DFS uptake of only 20% in terms of receiving and paying digitally fell far short of the government's ambitious target. The national strategy positions DFS as a key driver for financial inclusion, aiming to increase electronic payment usage among adults from 6% in 2015 to a significant 40% by 2020. To achieve this goal, the strategy focuses on increasing the availability of financial infrastructure. This includes raising the number of ATMs, point-of-sale (POS) machines, and agents per 100,000 adults to 25.4, 120.4, and 229.4, respectively.

6.8. Concluding Remarks

Ethiopia has embarked on a measured liberalization of its financial sector since 1992, reducing state control and fostering competition. Though this strategy has borne fruit in some areas, the liberalization efforts have not fully addressed the inherent problems in the sector. The sector is characterized by the dominance of the banking sector, limited access to credit, low uptake of digital financial services, and widespread financial exclusion, among others. Ethiopia's financial system is one of the least developed financial sectors. It is shallow and does not effectively support the needs of its growing economy. This underdeveloped financial sector is viewed to hinder industrial transformation, private sector development, and the nation's overall economic development. This chapter delves into the performance of Ethiopia's financial sector. It analyzes recent developments and assesses the performance of both the financial and monetary sectors.

The NBE prioritizes, among other things, price stability, financial stability, and sustainable economic growth in its monetary policy framework. Before 2023/24, the primary focus was on managing inflation and exchange rates by controlling monetary aggregates. Recently, departing from the quantity-based framework, the NBE has adopted an interest-based monetary policy with an NBR rate set at 15%.

Measured by the broad money supply, domestic liquidity in Ethiopia continued to grow during the past two decades. Broad money supply increased to 2.17 trillion birrs in 2022/23, indicating a 26.5% annual growth. This growth was attributed to a 26.6% surge in domestic credit. In addition, the holdings of currency by the public and demand deposits surged by 22% and 19.3% in 2022/23 respectively, contributing to the expansion of narrow money supply, a key measure of liquid money readily available for spending. Furthermore, quasi-money, which reflects less liquid instruments like time deposits and savings deposits, also saw a significant rise. Time deposits and savings deposits grew by an impressive 34.3% and 29.5% in 2022/23, respectively. This increase suggests the growing performance of deposits and preference for saving instruments.

Despite attempts to control inflation, it remained in double digits. Perhaps, on average, Ethiopia experienced an inflation rate of 14.5% across all categories (general, food, non-food) between 2002 and 2022. This shows that soaring inflation has emerged as a critical challenge for Ethiopia's macroeconomic stability in the past decade. The NBE introduced a 'new' monetary policy in August 2023, aiming to bring inflation down to below 20% in 2024. For this purpose, the Bank implemented a package of measures including credit growth limits, raising the interest rate, reducing direct advances to the government to limit its ability to spend, and potentially fuel inflation. Moreover, the government has raised the interest rate on its emergency lending facility from 16% to 18%.

In terms of structure, Ethiopia's financial system is dominated by banks while non-bank financial institutions are at their nascent stage of development. The banking sector itself is also dominated by state-owned banks, notably the Commercial Bank of Ethiopia and the Development Bank of Ethiopia. As a result, competition is limited as

shown by the high concentration ratio. In 2023, CBE's total assets and deposits constituted almost half (49.5% and 48.7%, respectively) of the whole banking sector. Lack of competition in the financial sector due to state dominance hinders further progress and creates a significant barrier to financing the economy.

Despite the dominance of state-owned banks, the Ethiopian financial sector is making strides in terms of accessibility and has shown signs of progress recently. Commercial banks have expanded their reach and increased their networks significantly due to the expansion of branches and the entry of new banks into the industry. As a result, the population-to-bank branch ratio increased significantly, reaching an all-time high of 11,516 people per branch in 2021/22.

The banking sector exhibits a high concentration in terms of assets and capital as the state-owned Commercial Bank of Ethiopia dominates the industry. The asset portfolio composition reflects the high concentration of the banking industry, with private banks being crowded out by government policies favoring state-owned banks. This dominance can restrict competition from private banks. This lack of competition in turn can potentially limit innovation and efficiency within the financial sector.

Though it declined in 2023, the Ethiopian banking sector maintained sufficient profitability. However, there is a concerning decline in its overall efficiency. This highlights the need for improved resource management and addressing inefficiencies in operations and potential shortcomings within financial institutions to sustain profitability and ensure the growth of the sector.

One of the main objectives of financial institutions is mobilizing resources, notably domestic savings, and channeling these to potential investors. Among other roles, it is of high importance in terms of financing the development of the country through the provision of

credits. There has been a recent shift in lending priorities in Ethiopia's banking sector. Previously, the public sector received most of the credit, but since 2021, lending to the private sector has surpassed that of the public sector. This suggests a potential focus on supporting business growth and development of the private sector.

There is a low allocation of credit to the productive sectors. The banking sector favors non-productive sectors compared to key economic productive sectors like agriculture. This is concerning because agriculture is a major part of the Ethiopian economy, and limited access to credit can hinder its growth.

Many Ethiopians rely on informal sources and family networks to borrow money, instead of financial institutions. The country has a large unbanked population, with limited access to formal financial services, including credit. This suggests that access to credit for businesses and individuals from formal financial institutions is limited. This can hinder entrepreneurship and business growth as businesses may struggle to secure financing for expansion or start-ups.

While Ethiopia has made strides in expanding financial inclusion, a significant portion of the population remains unbanked. Progress in Ethiopian financial inclusion leaves many behind. There is a large and widening gender gap and rural-urban divide in access to financial services. The growing gender gap and rural-urban divide in financial inclusion underscore the need for policymakers to prioritize efforts to enhance banking services to underserved areas and rural communities including women's access to financial services. Expanding financial inclusion, particularly in rural areas, and addressing limitations within the banking system could further unlock private sector growth. In general, emphasis on financial inclusion is needed to unleash the sector's full potential to contribute to the broader economic development of the country.

Ethiopia falls short in digital financial services relative to regional peers and the SSA average. Ethiopia has a low uptake of digital financial services compared with SSA countries. While Ethiopia has made progress in expanding financial inclusion, there's room for improvement as it remains underdeveloped compared to regional peers. More effort is needed to bridge the gap with comparable countries, particularly in access to and usage of digital financial services.

Building on the existing efforts and improvements, it is crucial to further improve financial inclusion, and digital financial services, and promote financial sector development in Ethiopia through various actions. This may include increasing physical reach and mobile money services. It is vital to prioritize expanding bank branches, ATMs, and agent banking networks in rural and underserved areas. This is expected to bring financial services closer to those who lack them. Moreover, mobile money network operators should be encouraged to expand their agent networks and promote mobile money services. This may leverage existing infrastructure for wider financial access.

It is crucial to narrow down the gender divide in financial inclusion through efforts such as financial literacy programs. In this regard, designing and delivering targeted financial literacy programs, focusing on women in rural areas can be instrumental. This is expected to empower individuals to make informed financial decisions and utilize DFS more effectively. Moreover, financial institutions may consider developing financial products and services that cater to the specific needs of women entrepreneurs and savers, which promotes participation in the formal financial sector.

By effectively addressing these issues, Ethiopia can create a more inclusive financial sector, empower unbanked populations, and drive economic growth through the participation of the wider population in the financial sector.

References

- Achew, M. B., Ambel, A. A., Gradstein, H. L., Tsegay, A. H., Ul Haq, I., Varghese, M. M., & Yonis, M. B. (2021). *Financial Inclusion in Ethiopia: Key Findings from The Ethiopia Socioeconomic Survey*. World Bank.
- Chauffour, J., & Gobezie, M. (2019). *Exiting Financial Repression: The case of Ethiopia*. World Bank.
- Deloitte. (2023). *East Africa Macroeconomic Outlook Volume IV*. Nairobi: Deloitte.
- Desalegn, G., & Yemataw, G. (2022). *Financial Inclusion in Ethiopia: Using LSMS (Ethiopia Socioeconomic Survey) Data*.
- Ethiopia, N. B. (2017). *Ethiopia: National Financial Inclusion Strategy*. Addis Ababa: NBE.
- First Consult. (2023). On multinational banks coming to Ethiopia
- Goshu, D., Shumetie, A., Tariku, L., & Getachew, D. (2022). *Inflation and the Ethiopian Economy: Constraints, Drivers, Costs and Policy Options*. Addis Ababa: EEA.
- Isayas, Y. (2022). Determinants of banks' profitability: Empirical evidence from banks in Ethiopia. *Cogent Economics & Finance*, 10:1, 1-15.
- Morsy, H., & Youssef, H. (2017). *Access to finance – mind the gender gap. Working Paper No. 202*. European Bank for Reconstruction and Development.
- National Bank of Ethiopia. (2017). *National Financial Inclusion Strategy*. Addis Ababa: NBE.
- _____. (2023). *Annual Report 2021/22*. Addis Ababa: NBE.
- _____. (2023). *Monetary Policy Statement*. Addis Ababa: NBE.
- _____. (2024). *Financial Stability Report*. Addis Ababa: NBE.
- World Bank. (2019). *Ethiopia Financial Sector Development: The path to an efficient, stable and inclusive financial sector*. Washington, D.C.: World Bank.
- Yu, H., & Zhao, J. (2024). Financial sector development and industrialization: lessons and prospects for Ethiopia. *China Economic Journal*, 300-321.

7. FISCAL DEVELOPMENTS

7.1. Introduction

Economic growth and development of any country is significantly determined by fiscal policies, which include revenue and expenditure of the government. Cristina and Michaela (2009) defined fiscal policy as the deliberate manipulation of government revenue and expenditure to have sustainable economic growth of a country. The International Monetary Fund (IMF) (2018) also argued that fiscal policy is the use of government spending and taxation to influence the economy. Fiscal policies are mainly utilized to promote strong and sustainable economic growth and finally reduce poverty. During times of global economic crises, fiscal policies could be crucial and gain prominence since they could support financial systems to initiate economic growth and mitigate the impact of the crisis on vulnerable groups.

Though balancing fiscal deficit and debt sustainability are key policy challenges of Ethiopia, the country registered robust economic growth averaging about 8% per annum for years 2006 to 2021 (Ministry of Finance (MoF), 2021). In the fiscal years, economic growth of the country was prominently sourced from the public-led investment spending mainly on infrastructural facilities. However, the successive and extended spending resulted in huge fiscal deficits that commonly result in domestic debt burden. Concerning fiscal operation of the country, National Bank of Ethiopia (NBE) (2021/22) reported that the government had a focus on fiscal policy measures that include tax revenue mobilization to have sustainable government spending from domestic sources. Accordingly, in 2021/22 domestic revenue of the country showed a 21.5% annual growth while the expenditure had a 30.1% increment resulting in a budget deficit equivalent to 3.4% of

GDP that was slightly higher than the targeted level (3%) in the fiscal year.

The sustaining macroeconomic imbalance that is fiscal deficit is affecting investment and overall economic performance of Ethiopia. Since the public¹³ investment in Ethiopia is significant enough in the effort of maintaining macroeconomic stability, expanding infrastructural facilities, eradicating poverty, enhance public welfare and secure high economic growth (MoF, 2021); sustaining fiscal deficits could deter those all. In the report, the ministry argued that maintaining fiscal deficit at a reasonable rate if the extent of the deficit and its financing are managed prudently, it has negative consequences on macroeconomic stability.

National Bank of Ethiopia (NBE) (2023) reported that in 2021/22, the Ethiopian government had an overall fiscal deficit of 239.0 billion Birr (excluding grants), which was larger than the deficit (Birr 154.4 billion) recorded before a year. In that fiscal year, total revenue of the government (including grants) registered a yearly growth of 18.3%, which resulted in 8.8% revenue to GDP ratio, but it was lower compared with the ratio (10.2%) in the preceding year. In 2021/22, government expenditure rose by 30.1% and its ratio to GDP reached 12.7%.

The current macroeconomic situation of Ethiopia is characterized by significant current account deficits, which result in dwindling international reserves and high debt accumulation. Additionally, shortage of hard currency reserves and rising inflation are the main challenges that deter investment and economic performance of the

¹³ Report of the National Bank in 2014/15 showed that the capital spending of the public and private were 2500 and 3136 million Birr, respectively, which had no significant difference.

country. Due to the foreign currency reserve shortage, capital goods imports of the country had declined by 24.6% in the first 10 months of 2021/22 (MoF, 2023). Given this, imports of raw materials declined by 21%, agricultural inputs fell by 43.8%, and industrial inputs by 27.3%, which could have an adverse impact on output and future productivity of the sectors.

Reports of the MoF revealed that, currently, the Ethiopian government is working on reform measures aiming for efficient use of resources at hand and avoiding ambitious and capital-intensive projects that require significant external financing. Major fiscal policy objectives of the government are to ensure sustainable and inclusive economic growth by increasing government revenues. During this process, the government frequently ensures that the public spending is devoted to promoting social and economic sectors that enhance sustainable economic growth. Considering these targets, fiscal policies utilized by the government include revenue mobilization, optimal allocation of public spending on welfare that bring high economic growth. Thus, fiscal policies could be prudent and instrumental in bringing fast, sustainable and broad-based growth through fair and progressive taxation, improved expenditure management and financing systems.

Hence, this report tried to address fiscal development of Ethiopia in the previous two decades. The report used quantitative secondary data from Ethiopian Statistical Service (ESS), National Bank of Ethiopia (NBE), MoF, International Monetary Fund (IMF), World Bank Group and other sources that collect data on performance of Ethiopian macroeconomic situation particularly on the fiscal balance and debt. The quantitative data in the report was analyzed using non-parametric methods, which consisted of narrations, tabulations, figures, and simple mathematical ratios.

7.2. Trend of the Government Revenue

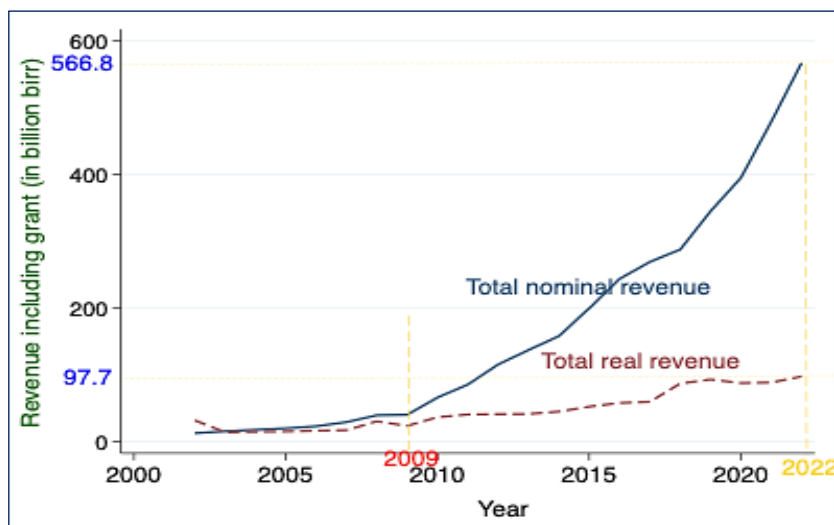
In the 2023/24 fiscal year, the Ethiopian Parliament approved a budget of Birr 802 billion, which had a 2% increment compared to the amount in the previous year. The allocated budget is equivalent to 15 billion USD and 7.1% of this year's anticipated GDP. In the fiscal year, about 65% of the overall public spending was expected to be sourced from domestic revenue and grants, while the remaining (35%) sourced from domestic borrowing (30%) and external lenders (5%). In the fiscal year, the government had a plan to reduce inflation through managing public spending towards the economy. However, unfavorable spending patterns became high enough with rising allocations for debt service and internal instability, which demand more than a quarter of the total public spending and a third of revenue in the fiscal year.

In 2023/24, an estimated Birr 480 billion revenue was expected to be collected from domestic sources; wherein the highest share, *i.e.*, Birr 188 billion or 39% of the total was expected to come from trade taxes. Direct taxes (Birr 141 billion, including corporate and income taxes) were expected to account for 30% of the domestic sourced revenue, while 112 billion and 39 billion Birr were planned to be collected from the indirect taxes that is VAT and non-tax revenue, respectively. In the fiscal year, the recurrent budget of the country accounts for 44%, which focuses on debt repayment, humanitarian assistance, reconstruction, and national defense. In the previous two decades (2002 to 2022), public revenue of Ethiopia increased at an increasing rate (more than 200%) per year in nominal terms. However, the real¹⁴ value of the budget allocated did not witness a significant increment, rather it had a modest increment in the previous few years. Figure 7.1. shows that the gap between the nominal and real public budget became wider and

¹⁴ Computed considering price in 2000 as a base year.

higher starting from 2009, which was because of the upsurging inflation that forced the government to allocate a larger budget in each successive year. The figure reveals that the real public revenue of the country was relatively constant in the previous three to four years, which resulted in an extensive gap from the nominal revenue.

Figure 7.1: Nominal and real public revenue including grant (in billion birr)

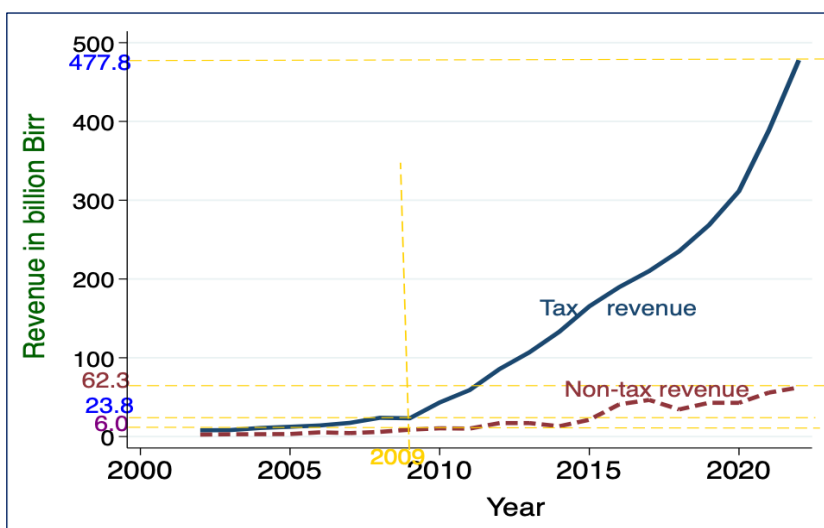


Source: Computed from data in the NBE (2001-2022)

Figure 7.2 shows that the significant proportion of the government revenue in Ethiopia has been collected from tax and related sources especially after 2010 in which the disparity from non-tax sources became wider and larger. Even though both tax and non-tax revenue of the government were growing in the previous two decades, the rate for the former was by-far larger, especially in the previous ten years (2012 to 2022). This implies that the government is trying to increase domestic revenue mobilization, which is also a fiscal policy to act

accordingly in managing macroeconomic problems. Currently, the government is collecting about 88.5% of its revenue from different types of tax, which implies that domestic revenue collection of the country is less diversified, while the government in Ethiopia has huge enrolment in the economy. The less diversified revenue source of the government may be highly vulnerable to shocks that affect the tax-base, and this could result in a huge budget deficit. The proportion was below 80% for the fiscal years before 2010, which implies that the public revenue of the country is relying highly on taxes in recent fiscal years.

Figure 7.2: Tax and non-tax revenue collection of the country (in billion birr)

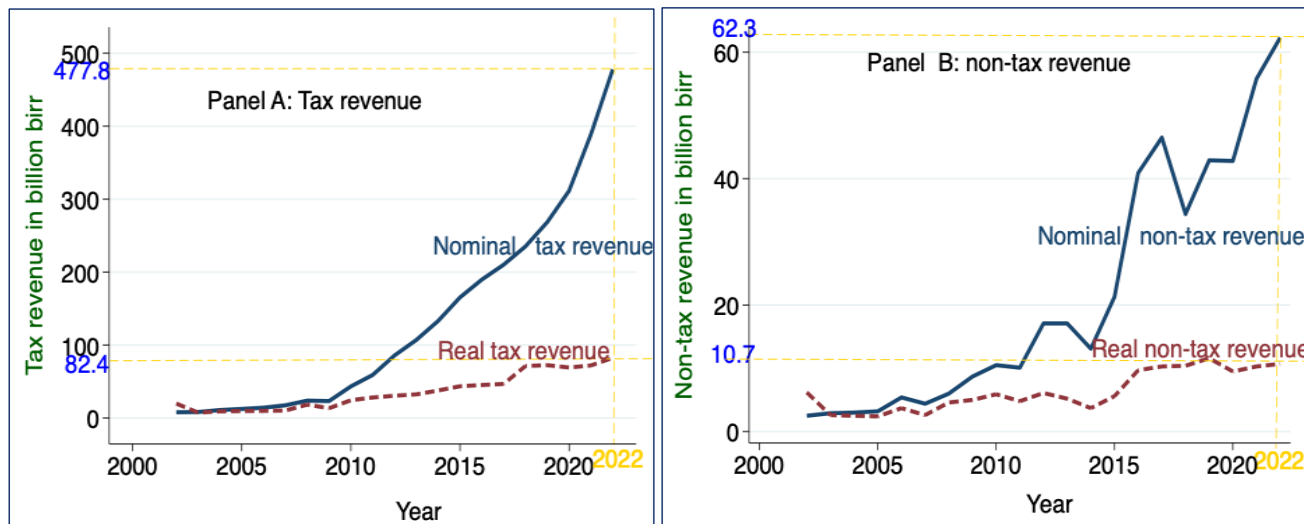


Source: Computed from data in the NBE (2001-2022)

Since 2009, nominal tax revenue has increased significantly, but real tax revenue (adjusted for inflation) has grown at a much slower rate. This trend implies that the government is focusing on boosting domestic revenue sources (Figure 7.3, Panel A). The gap between nominal and real tax revenue has widened since 2018, suggesting that there is

continuous inflationary pressure within the economy. In contrast, non-tax revenue has shown strong high variability in nominal terms, particularly in 2011, 2014, and 2018 (Figure 7.3, Panel B). Political and social unrest in 2018 and 2019 might explain these fluctuations. Overall, the government has prioritized mobilizing tax revenue, with nominal increases significantly outpacing non-tax revenue growth over the past two decades. However, the yearly growth of non-tax revenue, both nominal and real, has been much lower compared to tax revenue.

Figure 7.3: Real and nominal tax and non-tax revenue of the government in billion Birr



Source: Computed from data in the NBE (2001-2022)

Figure 7.4 shows that the tax revenue collection of Ethiopia from its potential (as a % of GDP) was strongly variable and relatively lower compared to other sub-Sahara African countries, which had more than 15% on average (See Figure 7.6). The low and significantly varying tax revenue collection of the country indicates that it needs much effort to properly and consistently utilize its potential. In the previous two consecutive decades, the country collected the maximum tax that was only 15.1% of the GDP in 2015. The tax revenue collection performance of the country had a subsequent reduction in between 2016 to 2022. In some of the fiscal years, tax revenue of the country was far-below compared to the percentage collected in some other years. For instance, the tax collection in 2009 was below half of the proportion collected in 2015.

Figure 7.4: GDP share of tax revenue for Ethiopia

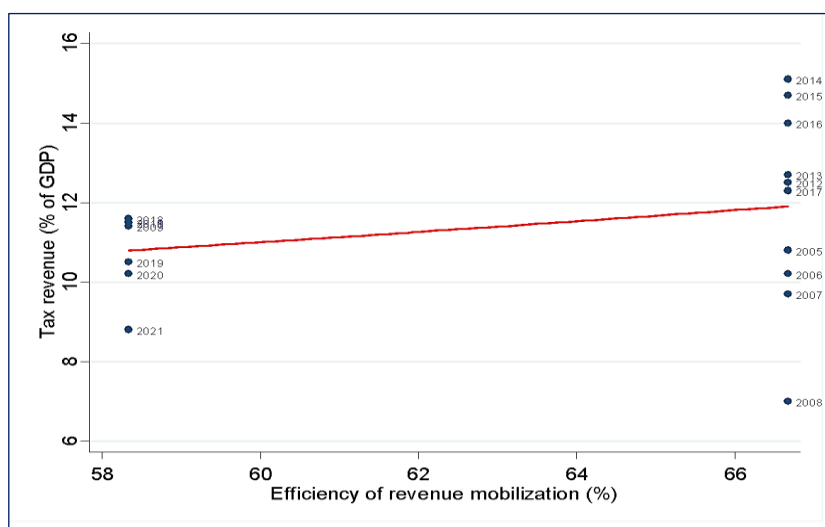


Source: Computed from data in the NBE (2001-2022)

Between 2010 and 2015, Ethiopia had made progress while utilizing its potential tax revenue mobilization compared to the respective year's

GDP. However, in recent years the ratio showed continuous reduction, which suggests the subsequent reduction in the government's revenue mobilization efficiency. Over the last two decades, two significantly different regimes of revenue mobilization efficiency have been observed. The first period likely saw a more effective approach, leading to the peak in 2015. The period after 2015 seems to be characterized by a decline in tax collection efficiency.

Figure 7.5: Tax collection efficiency of Ethiopia across years

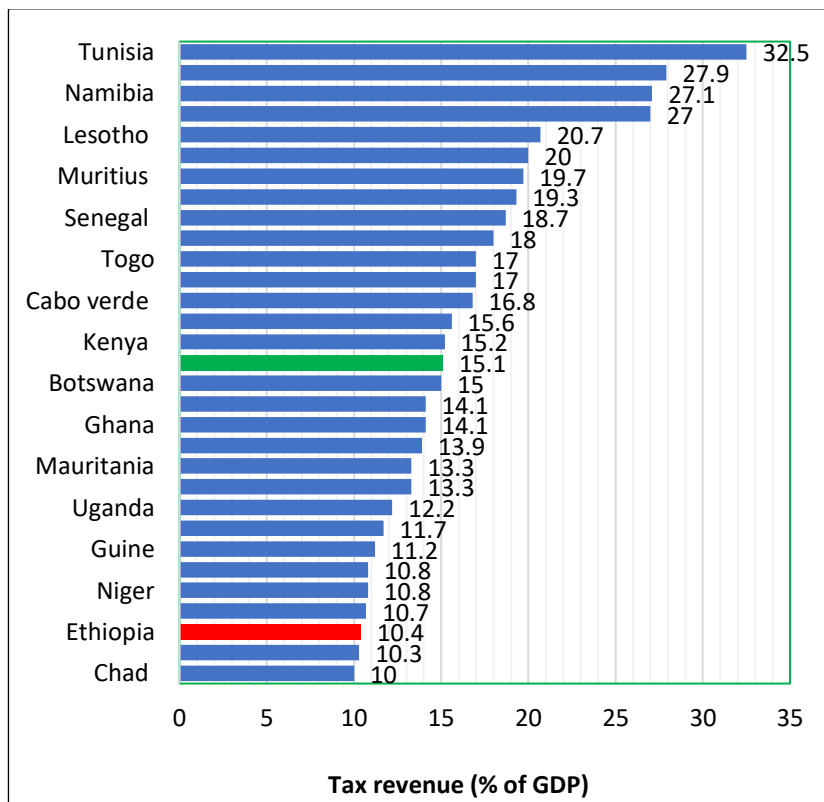


Source: Computed from data in the NBE and MBRSG (2001-2022)

Ethiopia's tax revenue potential utilization lags behind other African countries when we compare the proportion of tax from the GDP. The lower tax revenue proportion from the GDP has two implications: lower tax rate and/or narrow tax base. In 2021, the average for 30 African nations was 15.1% of the GDP, while Ethiopia only reached 10.4% (Figure 7.6). This shortfall was because of the continuously reducing proportion of tax-to-GDP since 2015, wherein the ratio dropped from 15.1% in 2015 to 10.4% in 2022, representing a 31.1% reduction. This

means Ethiopia is not only below the average of African countries but also falling further behind in recent times. To make matters worse, some neighboring East African countries like Kenya and Uganda outperform Ethiopia regarding tax revenue collection from their corresponding GDP.

Figure 7.6: GDP share of tax revenue in Africa (2021)



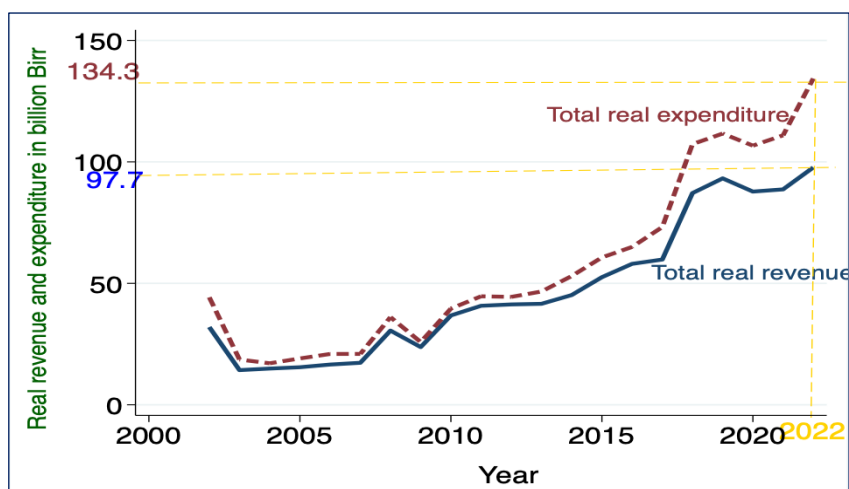
Source: Computed from data in OECD (2023)

7.3. Government Expenditure

Figure 7.7 presents real revenue and expenditure of the country in the previous two decades (2002 to 2022). In those fiscal years, real

expenditure of the country was higher than the revenue, which implies that the country had a budget deficit in each year with varying magnitude. In most of the fiscal years, public expenditure of the country had smooth and linear increment, even though there were a few drastic and radical upsurges such as in 2008, 2011 and 2018. Though the country was in a budget deficit between 2002 and 2022, the magnitude became larger in the recent five consecutive fiscal years, *i.e.* after 2016. In 2021 real expenditure of the country was 37.5% larger than the real revenue in the fiscal year, which implies that the budget deficit is going deep down in recent years.

Figure 7.7: Trend of real total revenue and expenditure in billion birr

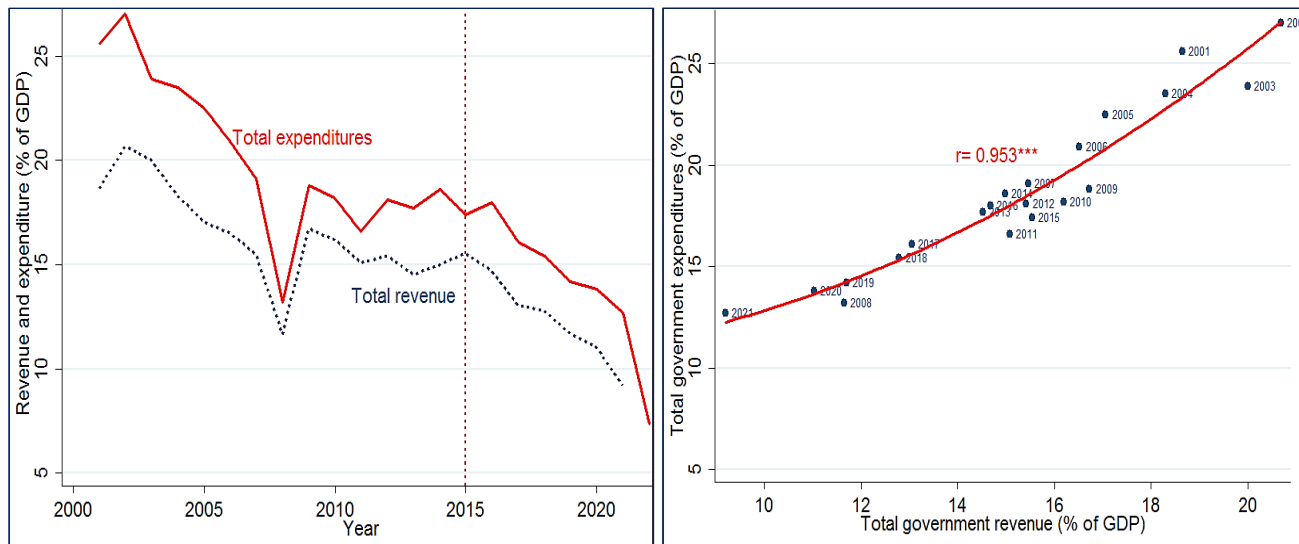


Source: Computed from data in the NBE (2022)

Like many nations facing fiscal deficits and high public spending, Ethiopia struggles with a government expenditure-to-GDP ratio exceeding its revenue-to-GDP ratio. The first panel of Figure 7.8 illustrates this, showing some variability in spending, particularly in 2009 and 2017, in both expenditure and revenue of the country. While

the overall trend suggests a continuous reduction in expenditure relative to GDP, the recent decline is sharper, falling below 13% of the projected GDP in 2021. Notably, Ethiopia's highest expenditure-to-GDP ratio was 27% in 2003, coinciding with a surge in grants that enabled the government to spend more compared to the size of the country's GDP. Compared to the size of the economy (as a % of GDP), the government budget in Ethiopia has been contracting over the last two decades, drastically falling particularly since 2017 (Second panel of Figure 7.8).

Figure 7.8: Government revenue and expenditure of Ethiopia



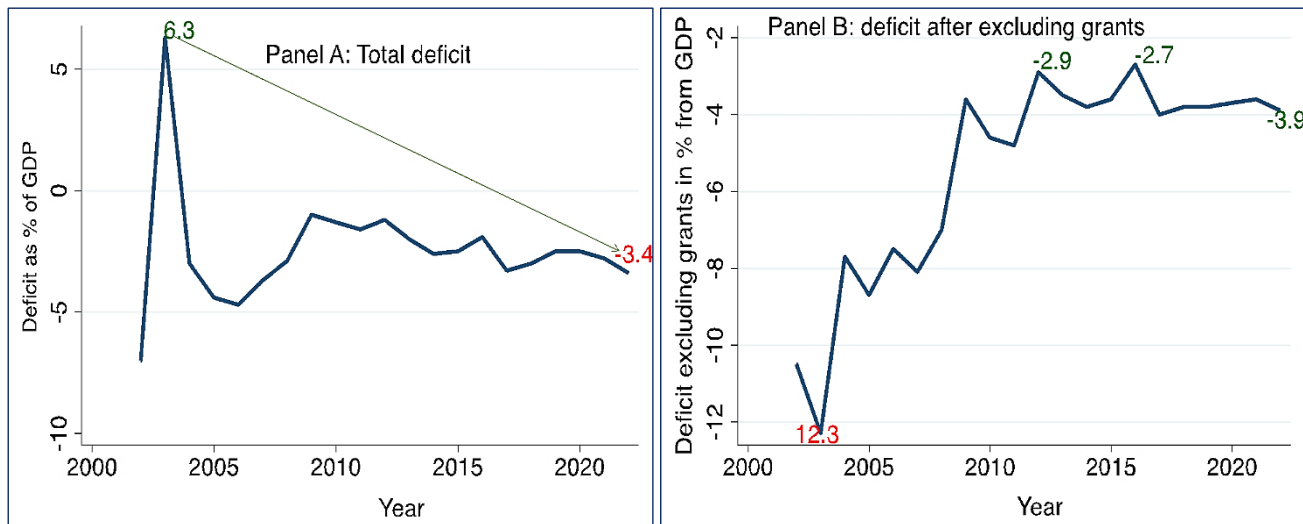
Source: Computed from data in the NBE (2001-2022)

7.4. Fiscal Balance

Fiscal balance, sometimes also referred to as the government budget balance, is calculated as the difference between a government's revenues and expenditures, and it may have positive or negative value depending on the magnitude of the two. It may be expressed as a percentage of the GDP, which shows how a country had the problem of fiscal balance compared to the anticipated GDP in the respective fiscal year. Figure 7.9 reveals that Ethiopia had different levels of deficit in the previous two decades. The figure indicates that spending of the government on public goods and services was more than the revenue it collected in the fiscal year. Such successive fiscal deficits could force the government to borrow money from domestic or foreign sources, which would increase the debt burden.

Panel A of Figure 7.9 reveals that in recent times fiscal deficit of the country has increased compared to the GDP of the country. For instance, in 2022, the fiscal deficit of the country was 3.4%, which was more than the threshold level of 1.5% of the GDP by Adam and Bevan (2003). The authors argued that if the deficit of a country is higher than 1.5%, then the problem could be a critical constraint for the economic progress of the country. Due to the huge grant collected in 2003, the country had a positive fiscal balance (excluding grants), but the country had successive reductions and went deep down in recent fiscal years. Panel B of the figure reveals that the deficit, computed after excluding grants collected by the country, had also increased especially in the previous five years. However, the magnitude of the fiscal balance of Ethiopia has improved if we compare the amount before two decades.

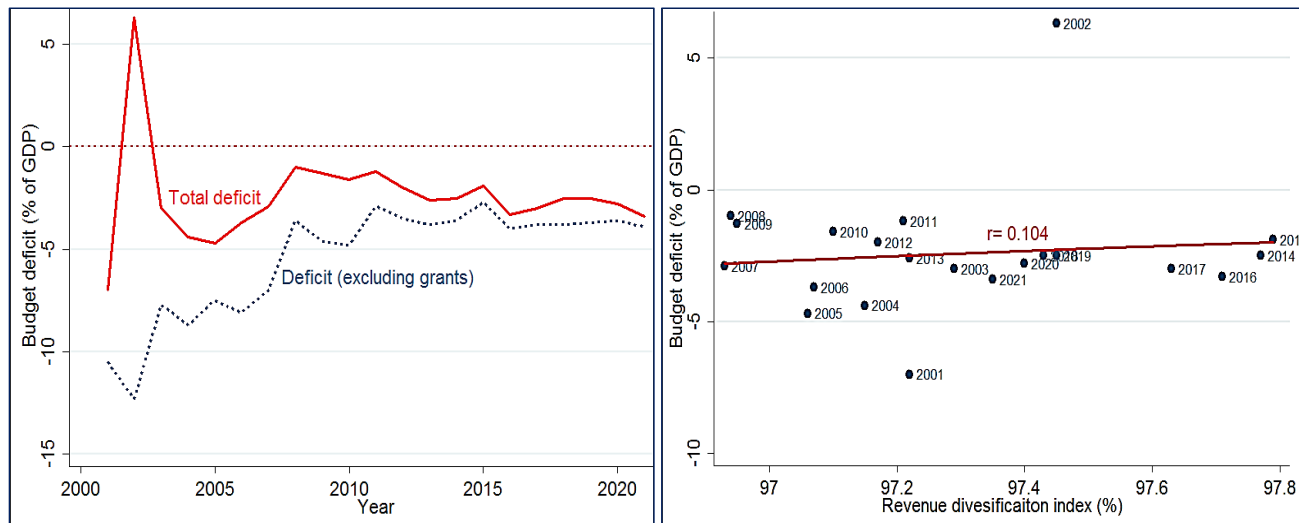
Figure 7.9: Fiscal deficit as a percent of GDP



Source: Computed from data in the MoF (2022)

The budget deficit in Ethiopia has remained nearly constant over the last two decades (left panel of Figure 7.10). To increase revenue generated from diversified sources, revenue diversification is a key. The dynamic link between budget deficit and revenue diversification over the last two decades is insignificant (right panel of figure). The government was not able to identify new sources of revenue, including new tax and non-tax sources of revenue. It was rather generating revenue from very limited sources, which might have led to multiple budget and financial risks.

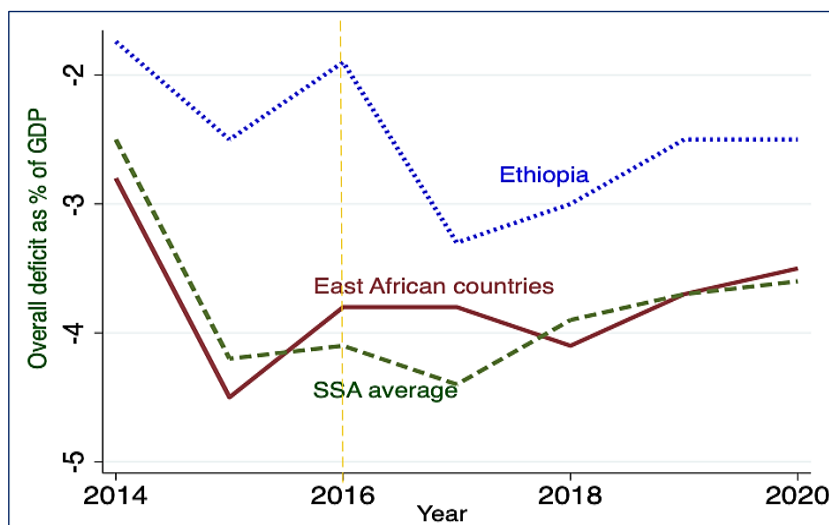
Figure 7.10: Budget and very low and unchanged revenue diversification over the last 22 years



Source: Computed from data in the NBE and MBRSG (2001-2022)

In SSA, fiscal policy often leaned towards budget deficits prompted by government involvement in economic activity and the need to fund public infrastructures (Ezekiel *et al.*, 2023). Figure 7.11 reveals that the fiscal balance of Ethiopia was relatively lower compared to the deficit for East African and SSA countries. The figure below reveals that the fiscal deficit of Ethiopia and other African countries was decreasing between 2015 and 2018, however the trend was not consistent even in those years. The ups and downs of the deficit in Ethiopia and other regions of Africa had a similar pattern. In the previous three years (2019 to 2021) the fiscal deficit of both Ethiopia and other African countries had increased consistently, which implies that African countries are immersing themselves deep into the boggy.

Figure 7.11: Overall actual fiscal deficit of Ethiopia, East Africa and SSA countries



Source: Computed from data in African Economic Outlook of the AU (2019)

Similarly, Fabio *et al.* (2023) had argued that Sub-Saharan African countries have been hit, in recent years, by a cascading series of shocks that exacerbated fiscal vulnerabilities. The authors recommended that significant reforms are needed to rebuild buffers and preserve the sustainability of public finance to hold back the continuous upsurge of the deficit. Findings imply that a strategic approach to fiscal policy is needed, as policies in the region typically lack an effective anchor and are excessively focused on short-term goals.

7.5. Public Debt

7.5.1. Debt outstanding

Public debt refers to the amounts owed by the different levels of government in the process of financing public deficits that result from higher spending on programs and projects. Debt may be sourced from domestic and/or abroad and usually takes the form of bonds, paper and government securities. The aggregate external public debt of the country comprises all federal government external loans contracted between external creditors and the Ministry of Finance, government-guaranteed debt owed by State-Owned Enterprises (SOEs), and non-guaranteed external debt contracted between public enterprises and external creditors. Compared to the ones extended to the central government, most credits to SOEs tend to be commercially oriented¹⁵, which have higher interest rates, lower grace periods, and fewer grant elements. As a result, they give rise to a higher debt servicing burden on the country. Basically, debt may be sourced from external or domestic sources of loan, which may be either from official or private creditors. The public debt of a country may include one or more of the following:

¹⁵ While only 5.6% of central government loans are from private creditors, the share of borrowing from private creditors for government guaranteed and non-guaranteed loans are 31% and 91%, respectively.

- | | |
|--|--|
| <p>(i) Central government external debt¹⁶,</p> <p>(ii) Government-guaranteed external debt¹⁸,</p> <p>(iii) Non-guaranteed external debt¹⁹,</p> | <p>(iv) Central government domestic debt¹⁷, and</p> <p>(v) Government-guaranteed domestic debt.</p> |
|--|--|

The total public debt in Ethiopia has been rapidly rising after 2015 and it reached a maximum of US\$ 62.5 billion in 2023 (left panel of Figure 7.12). Consequently, the total public debt per capita significantly increased between 2015 and 2023 and reached US\$ 575.6.

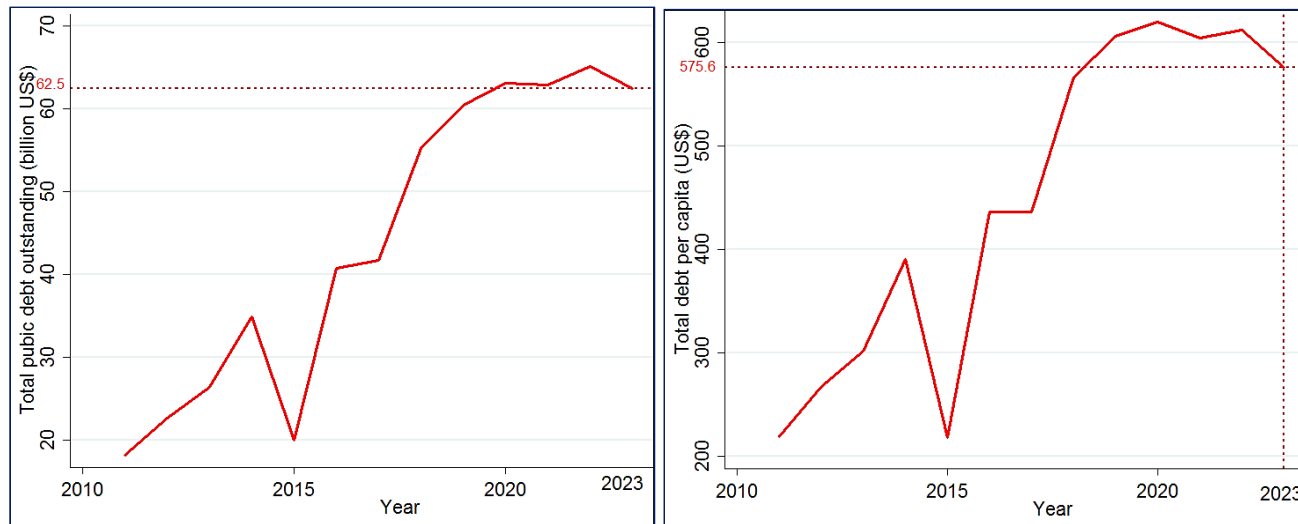
¹⁶ It refers all external loans contracted between external creditors and Ministry of Finance (MoF)

¹⁷ Covers the debt of the central government in forms of government bonds, treasury bills, direct advance from the central bank, Corporate Bonds, long- and short-term loans owed by SOEs.

¹⁸ It comprises loans and credits contracted by public enterprises (Ethiopian Electric Power and Electric Utility, Sugar Corporation, Railways Corporation, Shipping Lines) guaranteed by MoF and the Commercial Bank.

¹⁹ Includes loans contracted by public enterprises (Ethiopian Airlines and Ethio-Telecom), without guarantee of commercial bank

Figure 7.12: Drastic growth of debt in Ethiopia since 2015

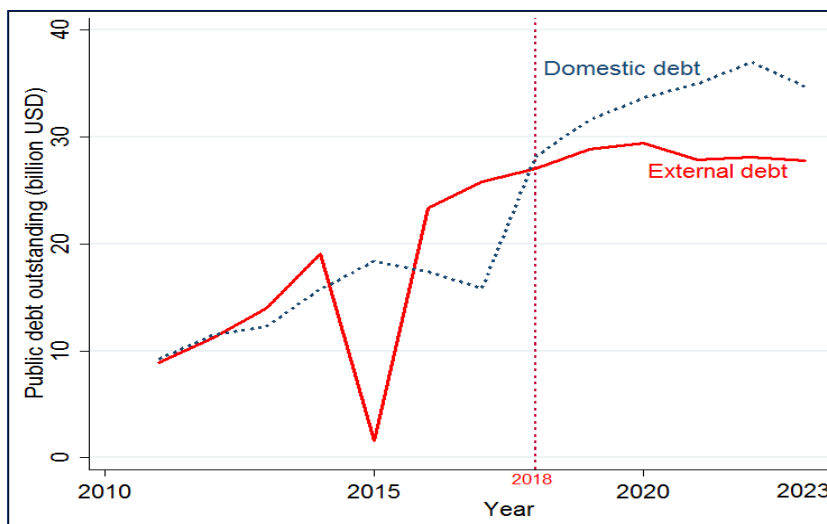


Note: The years denote the Ethiopia budget years as 2011 for 2011/12, 2012 for 2012/13, etc.

Source: Computed from data in the MoF (2011-2022)

In recent years, external sources of debt are decreasing significantly, and the government has been forced to shift towards domestic sources of credit²⁰ (Figure 7.13). After 2018, domestic public debt substantially surpassed external debt wherein credit for the private sector was adversely affected as of the competition between the public and private borrowers from domestic banks. The substantial reliance of the public on domestic sources of credit hinders allocation of money to the private investors that invest on crucial sectors for the economic development of the country.

Figure 7.13: Government shifting to domestic sources of debt since 2018



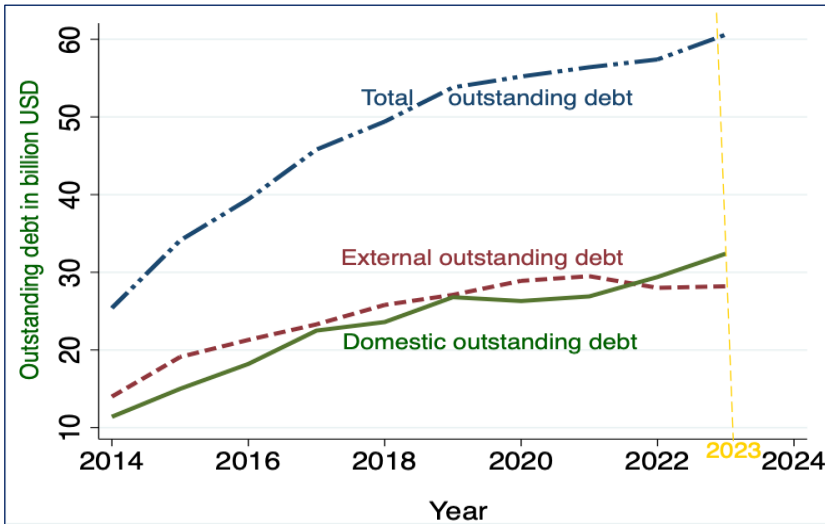
Source: Computed from data in the MoF (2011-2022)

²⁰ Borrowing from domestic and foreign sources has distinct advantages and disadvantages. Accessing credit from domestic sources has its impact on inflation, investment and other macroeconomic problems. Given this, credit from domestic sources has its own advantage in connection to debt payment pressure and other issues. Similarly, foreign credit offers its own set of benefits and drawbacks.

The January 2024 quarterly update of UNDP reported that the stock of Ethiopia's public sector debt stood at USD 63.2 billion or 38.7% of GDP at the end of September 2023 comprising USD 27.7 billion external debt and USD 35.5 billion domestic debt. Given this, the Ministry of Finance (MOF) (2023) of Ethiopia reported that the total public debt (domestic plus external) increased by 6% to USD 60.6 billion on March 31, 2023, from USD 57.4 billion on June 30, 2022. According to the report, on March 31, 2023, the nominal public sector debt of Ethiopia reached 38.8% of the GDP, while the nominal external debt accounted for nearly 18% of the percentage. Based on the report, domestic debt accounts for the majority (53.5%) of the public debt in 2023, and the remaining 46.5% belongs to external creditors. Most of the public total outstanding debt (domestic plus external) is held by the central Government, which accounts for 64.2% of it, while SOEs are responsible for the remaining 35.8%. On March 31, 2023, the total domestic debt was ETB 1.8 trillion showing an increment of 14.0% from ETB 1.5 trillion a year before.

Reports of international and national institutions showed that in 2023, the country had more than 60 billion USD outstanding debt from domestic and external sources, wherein the former took a significant share in the fiscal year. The larger domestic outstanding debt implies that in recent times the government has focused on domestic sources of credit, which may provide it better relief in the walk of paying the debt while pressuring the economy towards inflation as of injecting huge money towards the economy. Figure 7.14. reveals that small differences were there in few of the fiscal years, Ethiopian government had proportional outstanding debt from both domestic and external sources in the previous two decades.

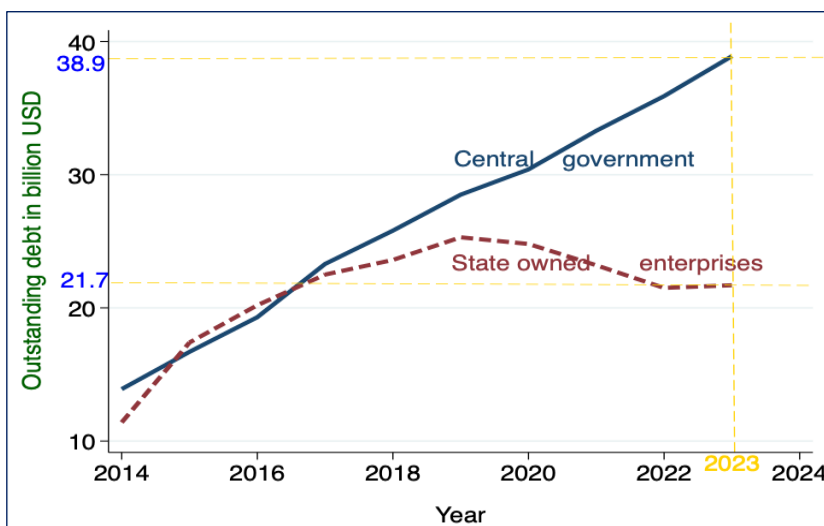
Figure 7.14: Outstanding debt of Ethiopia in billion USD



Source: Computed from data in the MoF (2023)

Ethiopia's public debt structure has shifted in recent years. Traditionally, the central government shouldered much of the external debt (87% in 2006/07) [MOF, 2023]. However, this share dipped to 52% by 2014/15 as State-Owned Enterprises (SOEs) increased borrowing for projects like sugar plants and railways. While some of these SOE loans were guaranteed by the government, the federal government remained the primary borrower until 2017 (Figure 7.15). Since then, a significant trend reversal has occurred. The central government's debt has seen a steady rise, particularly in recent years, while SOE debt has continuously decreased over the past five years (2019-2023). This widening disparity suggests that the recent surge in Ethiopia's public debt is primarily driven by central government borrowing from domestic and/or foreign creditors.

Figure 7.15: Total debt outstanding by central government and SOEs in billion USD

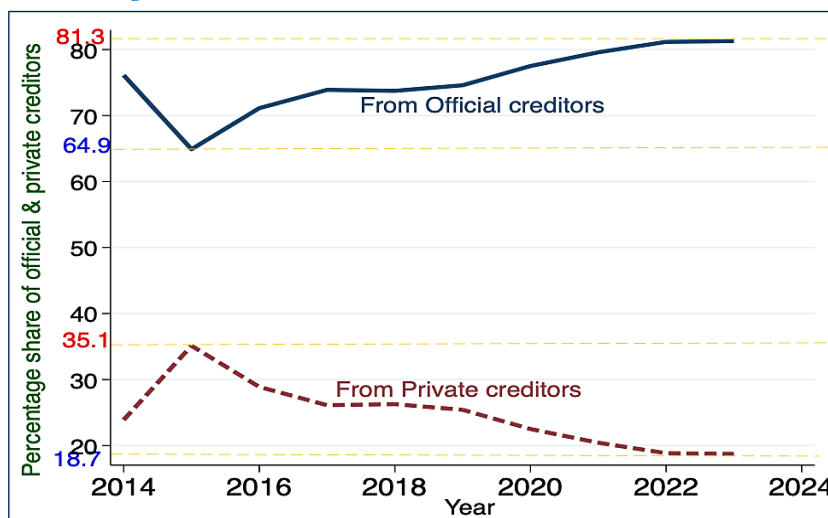


Source: Computed from data in the MoF (2023)

The Ethiopian government mobilizes external debt commonly from three sources: multilateral, bilateral, and private creditors (MoF, 2023). The multilateral sources include World Bank, the African Development Bank, the European Union, the Arab Bank for Economic Development for Africa, the OPEC Fund for International Development, IMF, etc. Moreover, Bilateral sources consist of the country's long-time development partners, the members and non-Paris Club members like the UK-DFID. Furthermore, Ethiopia has loans from Asian and Middle East countries that have recently transformed from aid recipients to donors. Given the multilateral and bilateral creditors, the Ethiopian government and SOEs collect credits from private creditors, which includes commercial Banks, suppliers, and Euro bondholders. Over the last five years (2019 to 2023), there has been a trend reversal with official credits, particularly from the multilateral creditors, being the overwhelming source of external loans for the country. The MOF

(2020) reported that by June 2020, 77.3% of the total external outstanding loan was owed to official creditors, which implies that a significant proportion of the debt in the country is sourced from those creditors. Particularly, 48% of the total outstanding loan is sourced from multilateral creditors. Figure 7.15 reveals that in the previous years, a significant proportion of the outstanding debt of Ethiopia was mainly sourced from official creditors. In 2021 and 2022, more than 80% of the outstanding debt of the country was from the official creditors as indicated in the values of the following figure. Rising outstanding debt may increase the credit risk for private lenders to the federal government of Ethiopia. Increased probability of credit risk may result in reduced credit availability. Lenders could experience losses on interest and principal, cash flow disruptions, and higher collection expenses, all of which contribute to lower credit provision.

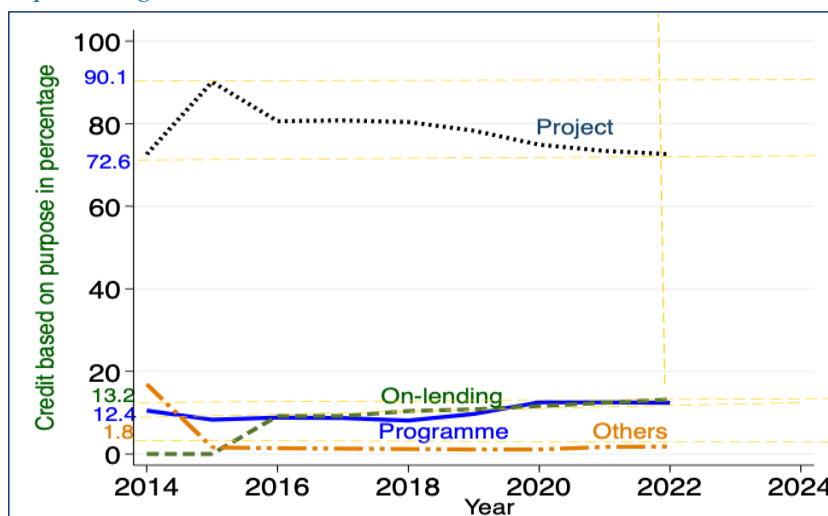
Figure 7.16: Share of official and private creditors in the total outstanding debt



Source: Computed from data in the MoF (2023)

Figure 7.17 presented the trend of outstanding debt based on the purpose of the credit collected either by the central government or the SOEs. In the previous two decades, the outstanding debt of the country was because of the credits for managing the project works, which targeted the economic development of the country. In the previous few years (2014 to 2022), on average more than 77% of the outstanding debt of the country was because of the credits to finance projects. However, the proportion had a successive reduction in the previous few years due to successive increments of credits for program and on-lending²¹ activities.

Figure 7.17: Public sector external debt outstanding by loan purpose in percentage



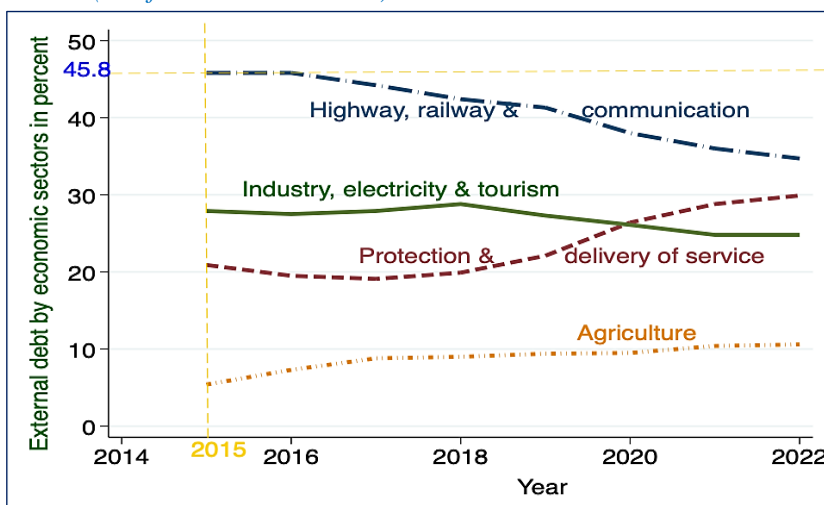
Source: Computed from data in the MoF (2023)

Figure 7.18 shows that a significant proportion of the outstanding debt of the country was sourced from the credits for managing highways, railways and communication services, especially under GTP I and II.

²¹ Comprises of Disbursed and Outstanding Debt of Onlent loans from External Borrowings (Excludes the Stock of Onlent loans Transferred from External grants).

During the time of GTP II (2015 to 2020) about 43% of the national outstanding debt was sourced from credits flowing towards constructing infrastructural facilities. Some of the projects have been delayed and a few totally failed, which resulted in a huge debt burden on the country.

Figure 7.18: Public sector external debt outstanding by economic sectors (% of total external debt)



Source: Computed from data in the MoF (2023)

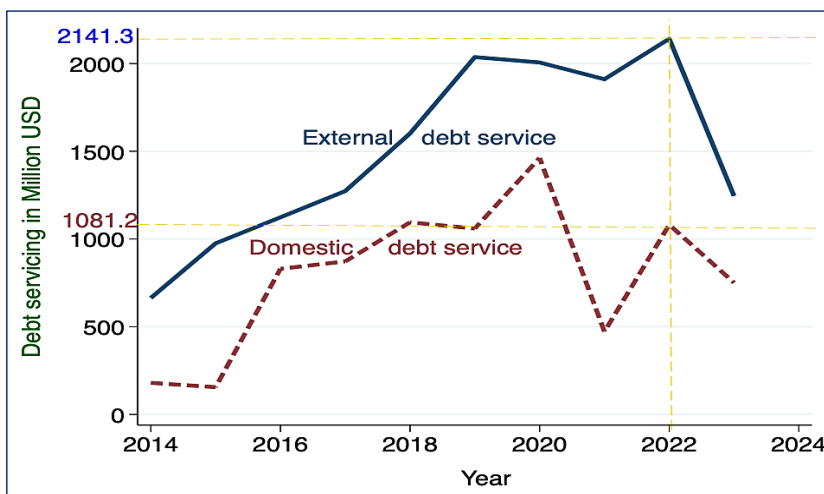
Figure 7.18 also shows that the outstanding debt of credit to manage activities in the industrial sector and established infrastructural facilities such as renewable electric sources, took the second position in recent times. Given this, the external debt due to credits collected for managing protection and delivery of services on education, health, water and public services also had a significant proportion in the previous years. The sectoral distribution of foreign loans significantly impacts economic growth by determining which industries or sectors receive the fund, thereby influencing the sectoral capacity to innovate, and contribute to overall GDP (Tesfamlak *et al.*, 2024). The authors argued that when loans are concentrated in high-potential sectors with

strong multiplier effects, it could result in substantial economic growth, while misallocation to less productive sectors can hinder development and finally result in debt burden.

7.5.2. Debt service

In 2023 debt-service payments, which include principal and interest, had increased by 5% over the previous year for all developing countries (World Bank Group, 2023). Figure 7.19 reveals that a significant proportion of the debt service was mandated to the central government that intended to be paid for by external and domestic creditors. The gap between external and domestic debt service was wider between 2018 and 2022, compared to the gap before and after those years. In 2022, the debt service to be paid for external creditors was more than double the amount for domestic creditors, which implies that in recent times the country is paying more hard currencies.

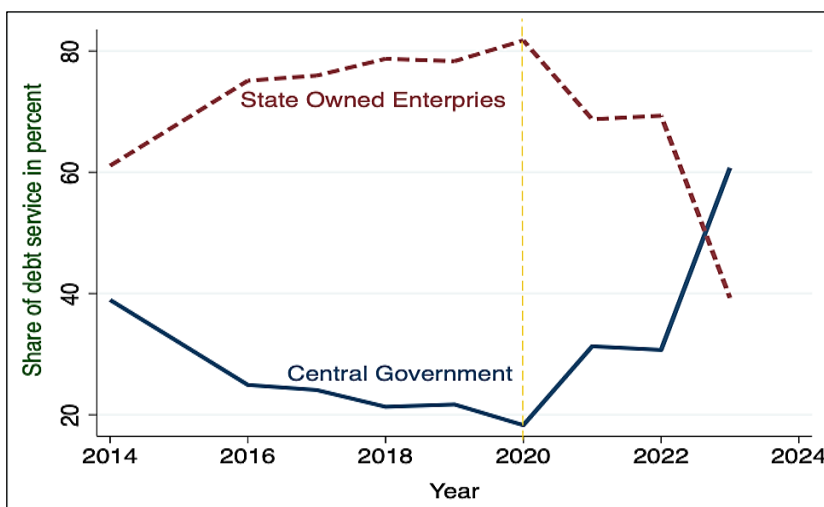
Figure 7.19: Debt service from central government and SOEs in Million USD



Source: Computed from data in the MoF (2023)

In the previous few fiscal years (2014 to 2022) a significant proportion of the debt service in Ethiopia was managed by the SOEs, which was common because of short maturity dates and high interest rates. Figure 7.20 shows that in recent times, the country has huge obligations to pay public debt owned by the central government as part of the loan for projects during the GTP I and II.

Figure 7.20: Share of debt service by the central government and SOEs in percent

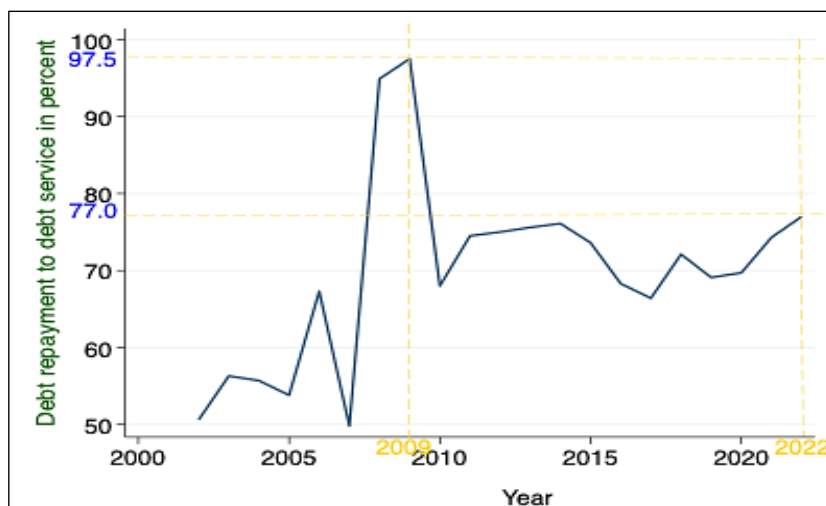


Source: Computed from data in the MoF (2023)

International finance institutions reported that debt becomes a potential problem of an economy only when the borrower is unable to generate sufficient funds to meet the repayments. Many developing countries have recently encountered such difficulties. Figure 7.21 reveals that the country had a different level of repayment from its debt with a maturity date and classified as debt service, which comprises the principal and interest rate. Based on the figure, Ethiopia had paid more than 95% of its debt service in 2008 and 2009, but the repayment went down in the

succeeding fiscal years. Recently, in 2021 and 2022, the country paid about 77% of its debt service, which was a good progress compared to the amount paid before five years.

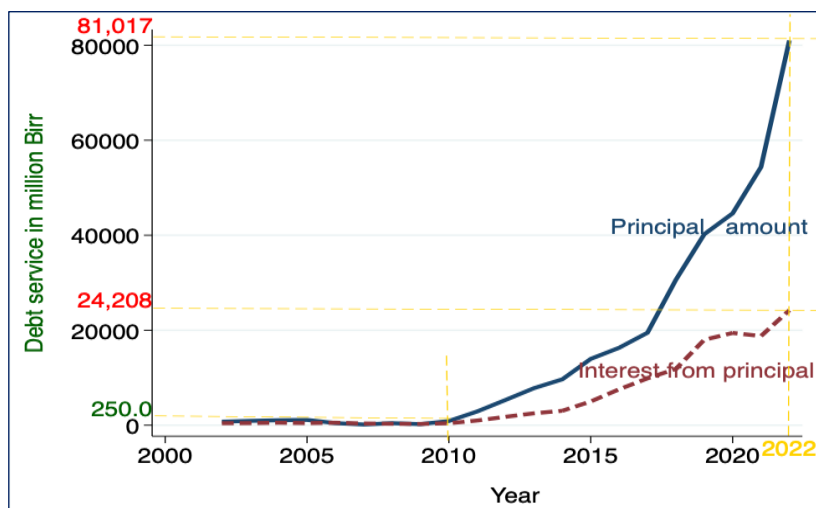
Figure 7.21: Debt repayment to debt service ratio of Ethiopia



Source: Computed from data in the MoF (2023)

Figure 7.22 below reveals that a relatively larger proportion of the debt service of the country was the principal in the loans collected ahead. Both the principal and interest rate debt service were relatively lower and proportioned before 2010, but in recent times both had an exponential growth, which demanded huge debt repayment and burden on the economy. The figure below reveals that both the principal and interest rates on debt service were growing drastically, especially in the previous five years. In 2022 the interest rate from the total debt service of the country was about 23%, which looks smaller compared to the proportion before five years ago.

Figure 7.22: Principal and interest rate of the debt service (in million Birr)



Source: Computed from data in the World Bank (2022)

7.5.3. Debt burden

UNECA (2007) reported that the impact of the heavy external debt burden on the economies of developing countries, including those in Africa, has received extensive debate in different media. Interactions between different policy variables (such as debt, fiscal, and interest rate policies), outcome variables (such as GDP and export growth), and international economic conditions (international interest only rates) jointly define whether a country is on a sustainable debt path. The debt sustainability of a country can be measured by two export-related indicators such as the present value of public and publicly guaranteed (PPG) external debt-to-exports and external debt service-to-exports ratios. The two ratios will be compared with the respective thresholds identified by the IMF for low-income countries. In addition to the two

methods, the analysis can be done by considering the debt service-to-revenue and comparing the ratio with the threshold level.

Ethiopia's public debt-to-GDP ratio declined to 35.2% in 2009 from 67.9% in 2006 following the Heavily Indebted Poor Countries (*HIPC*) initiative and prudent fiscal stance to fiscal deficit and public debt. However, the trend reversed course thereafter and by 2011 increased by almost 30% to 45.3%. This scenario coincided with high spending in the election year (2010) and the start of GTP-I which promoted the construction of industrial parks and other large infrastructure investments, including major highways, railways, and the Grand Ethiopian Renaissance Dam. The IMF reported that in 2017, Ethiopia's debt-carrying capacity was identified as "medium" based on a Composite Index (CI), which tried to show the capacity by considering the threshold value for the Low-Income Countries Debt Sustainability Framework (LIC-DSF). If the composite index is in between the 2.69 to 3.05 range, then the country could be at a medium capacity, wherein Ethiopia had 2.72 in 2017. Figure 7.23 shows that in 2018, the debt-to-GDP ratio of the country had increased to 58.5%, which shifted the country's debt burden to the level of strong debt stress with a ratio of more than 55%²². In the previous decade, the country had a 55.86% debt to GDP ratio on average, which was slightly higher than the threshold level of the IMF to level the country as a nation with a strong debt burden.

²² The IMF leveled that if the present value of external debt to GDP is above 55%, then the country could be under strong debt stress. Moreover, if it is below 30% or 40%, then it could be in weak or medium debt stress, respectively.

Figure 7.23: Pattern of public debt to GDP ratio for Ethiopia

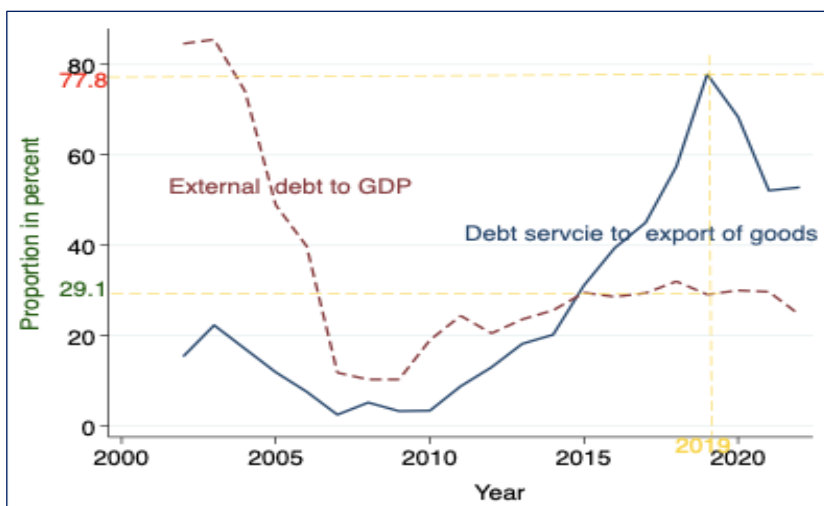


Source: Computed from data in the IMF (2024)

In addition to the GDP-based debt burden measurement, it is possible to compute external debt service to export and revenue ratios and compare them with the threshold level of the IMF, to check Ethiopia's debt carrying capacity or debt sustainability. In this regard, the country had a strong debt burden in recent fiscal years especially. The debt service to export ratio was also by far higher than the threshold level of being at a strong debt burden. Figure 7.24 shows the trend of external debt to GDP ratio and debt service to export of the country. The former ratio shows that in the previous two fiscal years, the debt burden of the country was decreasing, which may be because of the continuous effort in debt repayment. Before 20 years of external debt, the country was 85.5% of its GDP, but nowadays it is about 25% as of the continuous effort to pay from its exports. Debt service, which shows that amount to be paid, was 22.3% of the export of goods and services before 20 years, but it is more than 55% in 2022, which implies that the debt to

be paid is growing progressively and needs strong attention to pay it on time.

Figure 7.24: Trend of external debt to export and GDP ratio (in percentage)



Source: Computed from data in the World Bank (2022)

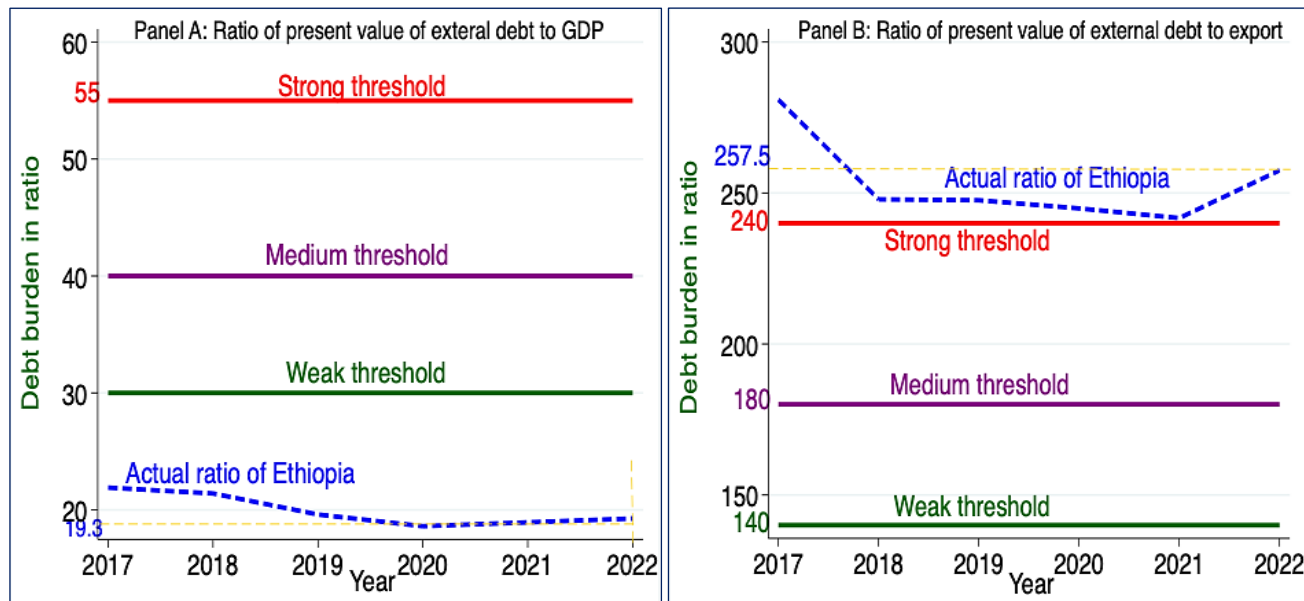
Panel A of Figure 7.25 shows that the present value of external debt to GDP ratio of Ethiopia was 19.3% in 2022, which was lower than the threshold level to categorize the country under weak debt burden. Hence, considering this ratio the country has a better position to pay its debt, which implies that considering the GDP Ethiopia has a lower debt burden. In previous four years (2019 to 2022) there was improvement compared to the ratio in 2017 and 2018, which was the result of debt reprofiling of some SOEs the external debt with the Chinese creditors, especially the Ethiopian railways corporations and the other reason was

because of reducing non-concessional²³ borrowing in the last three years, except that of Ethiopian Airlines (MOF, 2021).

Panel B of the figure presents the ratio of present value of external debt to export in which Ethiopia had already surpassed the threshold level (240) of “strong” debt stress in all the fiscal years considered. For instance, Ethiopia has a present value of external debt to export ratio of 257.5 while the threshold level is 240 in 2022. Considering its export revenue, Ethiopia is in “strong” debt stress to pay its public debt, which implies that export of the country is not performing well. For some of the fiscal years such as 2017, 2018, and 2022 the debt stress was severe, which implies that export revenue of the country was relatively lower in those years.

²³ These are loans, typically used in relation to Multilateral Development Banks, with a market-based interest rate and substantially less generous terms than concessional loans.

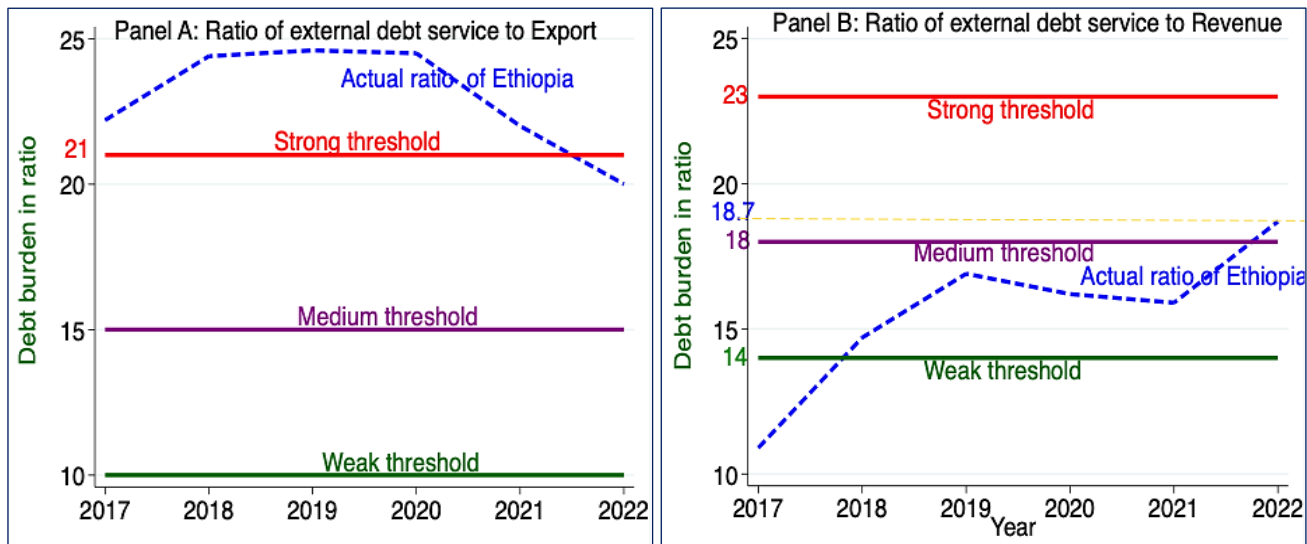
Figure 7.25: Ratio of present value of external debt to GDP and export



Source: Computed from data in the IMF (2022)

Given the above two ratios to measure debt burden of the country, liquidity ratio, or the external debt service to export ratio could be also computed and compared with the IMF threshold level to decide the country's status. Hence, panel A of Figure 7.26 shows that the country was at the “strong” debt stress zone in the previous five years (2017 to 2021), however, it had improvement in 2022 and crossed down to the “medium” debt stress zone. Though this is the case, the country needs additional efforts to improve its exports to further enhance its debt payment capacity. The results show that the Ethiopia government needs serious attention to successively and sustainably improve its export revenue to reduce debt stress of the country. UNDP (2024) reported that developing countries had an external debt servicing to export ratio of 22%, which is above the IMF recommended ceiling of 15% for “medium” debt stress, which implies that debt burden is a serious issue of those countries considering their export as a reference point.

Figure 7.26: External debt service-to-export and -revenue ratios

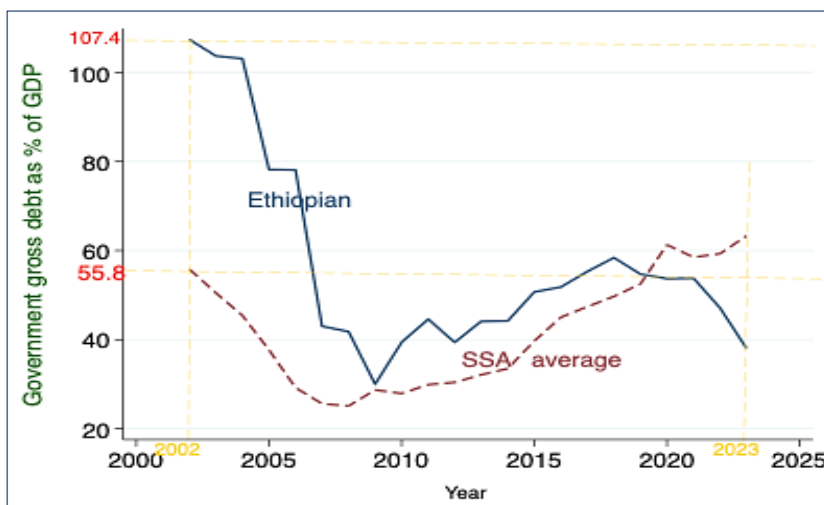


Source: Computed from data in the IMF (2022)

Panel B of Figure 7.27 above reveals that the debt burden of Ethiopia is passing the threshold level of “medium” considering the ratio of external debt service to government revenue. Based on this ratio, the debt burden of the country is becoming severe in recent times, which may be because of the recent deteriorating performance in collecting public revenue from different sources. In 2022, external debt service to revenue ratio of the country had relatively faster increment and reached to 18.7, which was higher than the threshold level (18) to be within the range of “medium” burden. The recurrent socio-political condition may damp down the effort of the government to collect the potential revenue, which finally results in having a high debt burden.

Figure 8.30 reveals that in between 2000 and 2019 Ethiopia had relatively higher debt burden compared to SSA countries, however, due to recent effort of repayment and successive reduction in the borrowing, debt burden Ethiopia had a recent reduction especially after 2020. In the previous two decades, the trend of government gross debt as a percentage of GDP was similar for Ethiopia and SSA though the magnitude was quite different. After 2019, the percentage share of gross debt from the GDP of Ethiopia had a successive reduction compared to the amount in SSA countries. The IMF forecasted that in the coming five years gross debt as percentage of Ethiopian GDP will subsequently reduce at a faster rate compared to the case for SSA, which implies that the recent scenario of improvement in det burden of the country will continue for the coming few years until 2029.

Figure 7.27: General government gross debt as percentage of GDP in Ethiopia and SSA



Source: Computed from data in the IMF (2021-2028)

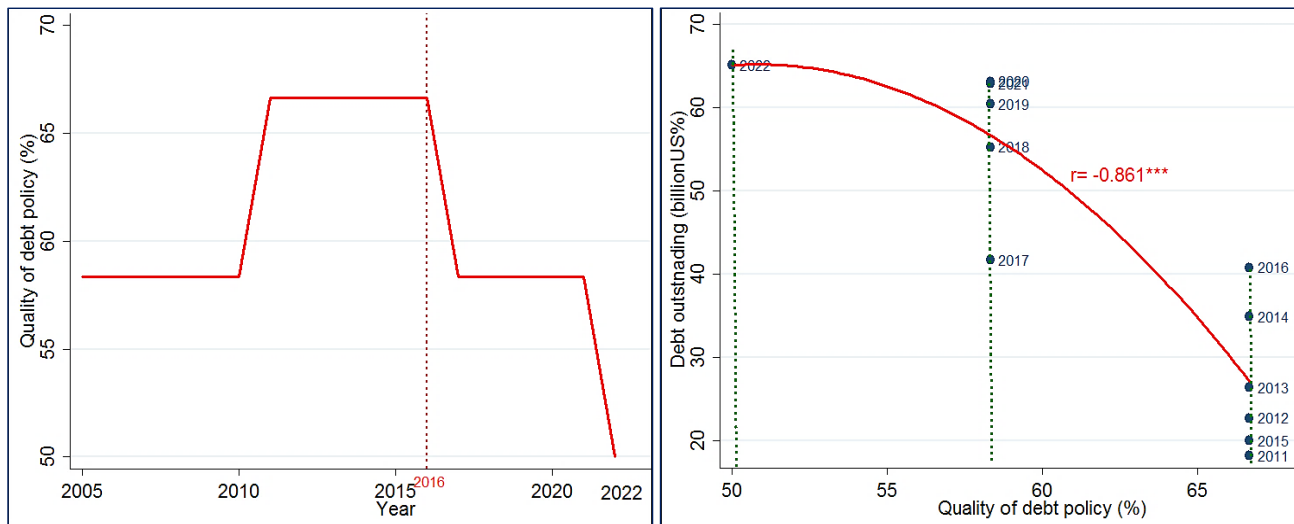
7.5.4. Debt and fiscal policies

Debt policy assesses whether the debt management strategy of a country is conducive enough to minimize budgetary risks and ensure long-term debt sustainability. The World Bank measures the debt policy rate of countries and regional economies, and the rate could vary between 1(low) and 6 (high). The Country Policy Institutional Assessment (CPIA) exercise tried to capture the quality of a country's policies and institutional arrangements, focusing on key elements that are within the country's control, rather than on outcomes (such as economic growth rates) that are influenced by events beyond the country's control. More specifically, the CPIA measures the extent to which a country's policy and institutional framework supports sustainable growth and poverty reduction and, consequently, the effective use of development assistance. Accordingly, higher scores can

be attained by a country that has a policy and institutional framework that strongly fosters growth and poverty reduction.

The debt policy pursued by governments is vital to guide the process of debt evaluation and debt issuance practices. The debt policy pursued by the government of Ethiopia is expected to have led to the current debt distress and vulnerability (left panel of Figure 7.28). The ever-imprudent debt policy in Ethiopia has been pursued since 2016. The long run dynamic link between the debt policy and the level of total debt outstanding verifies the consistent deterioration of quality of debt policy in Ethiopia (right panel of figure 7.28).

Figure 7.28: Debt rising with imprudent debt policy pursued since 2016



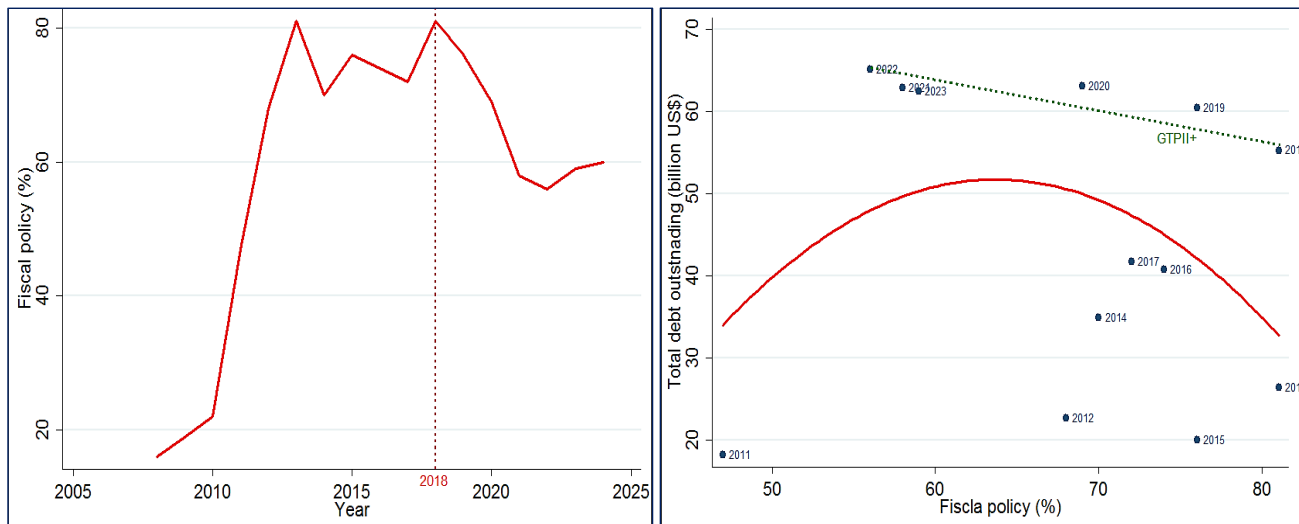
Source: Computed from data in the MoF and World Bank (2005-2022)

The other reason for debt vulnerability in Ethiopia is the fiscal policy pursued, and the associated fiscal discipline practiced by the government. The fiscal policy, which is the use of government spending, taxation and borrowing to influence the economy, is instrumental to promote strong and sustainable growth and reduce poverty. Moreover, the fiscal discipline practiced by governments is expected to maintain fiscal positions that are consistent with macroeconomic stability and sustained economic growth. This is possible if the government avoids excessive borrowing and debt accumulation. Expansionary fiscal policy increases aggregate demand by lowering taxes or increasing government spending. Contractionary fiscal policy, on the other hand, reduces aggregate demand and fights inflation by raising taxes or reducing government spending.

However, fiscal policy²⁴ pursued by the government was rapidly deteriorating since 2018 (left panel of Figure 7.29). Net lending was falling but net borrowing by the government was rising after 2018. The systematic dynamic link between total debt outstanding and fiscal policy since the second GTP is negative, verifying that the current debt distress is associated with the poor fiscal policy pursued by the government (right panel of figure).

²⁴ As to Millennium Challenge Corporation (MCC) (2021) fiscal policy measured by general government net lending/borrowing as a percent of GDP, averaged over a three-year period. Net lending/borrowing is calculated as revenue minus total expenditure.

Figure 7.29: Total debt rising with imprudent fiscal policy since 2018

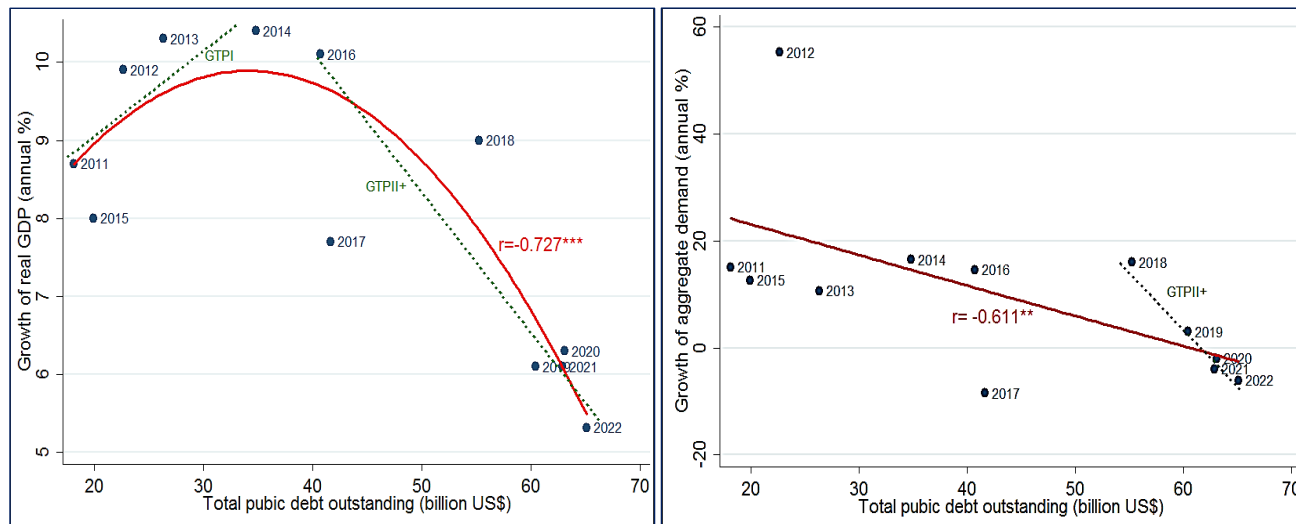


Source: Computed from data in the MoF and MCC (2008-2024)

Imprudent debt and fiscal policy pursued by the government and the associated debt burden were investigated for their impact on the macroeconomy. The rising debt burden in recent years strongly and adversely affected growth of aggregate output (left panel of Figure 7.30). Unlike the positive link between debt and aggregate output observed in GTPI, excessive debt outstanding in recent years has aggravated the shortfall of aggregate output and supply in Ethiopia.

The long run dynamic link between aggregate output and debt outstanding is significantly negative with strong association in recent years (right panel of figure). The excessive rise in debt outstanding has adversely affected aggregate output. This has led to slowed economic growth which may be translated to overall economic decline, in which both aggregate output and demand contract.

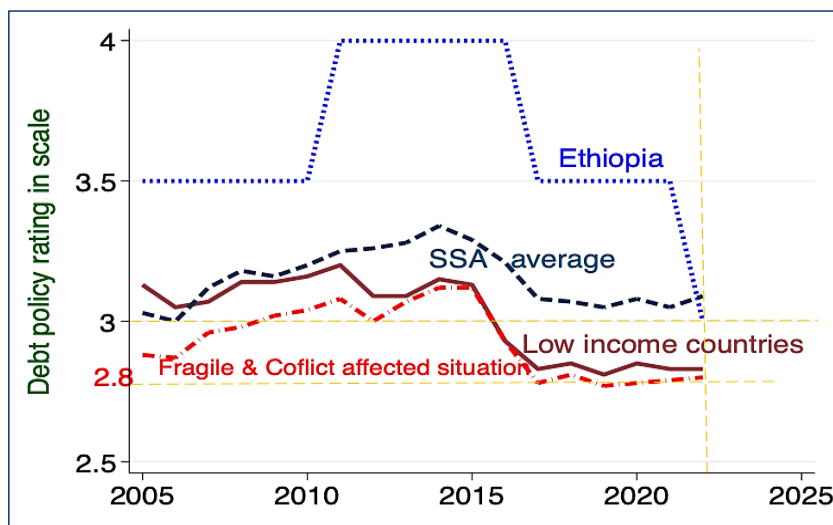
Figure 7.30: Slowed growth of aggregate output and demand with increasing debt since 2016



Source: Computed from data in the MoF and NBE (2011-2022)

Figure 7.31 shows that compared to countries in SSA, low income and fragile states, Ethiopia had a better but deteriorating debt policy rating in the previous few years. Ethiopia had the best performance in between 2010 and 2015, but its effort continuously declined in recent times especially after 2020. In 2022, debt policy rating of Ethiopia was below SSA countries' average, however, it had better effort compared to low-income countries and fragile and conflict affected situations. If the federal government of the country does not provide attention for its strategies and institutional set-ups, the country's effectiveness regarding debt policies could be below even the performance of fragile and conflict affected countries.

Figure 7.31: Debt policy rating of Ethiopia and other regional economies



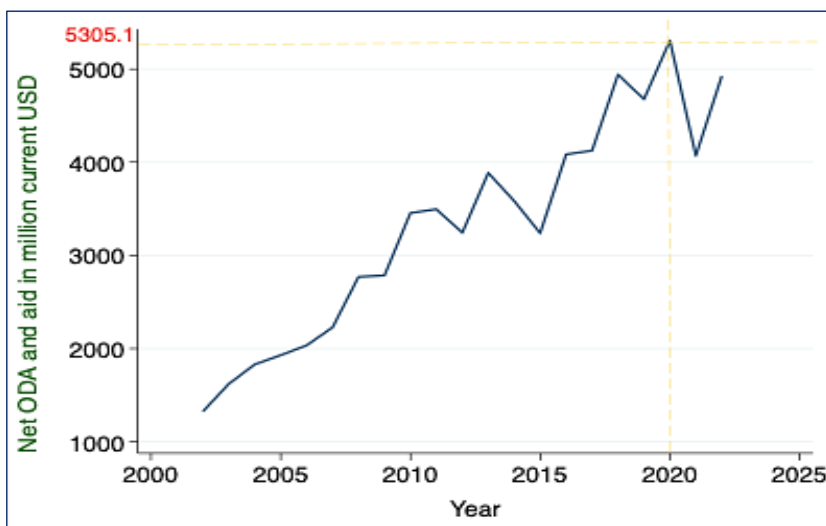
Source: Computed from data in the World Bank (2005-2022)

7.6. Official Development Assistance and Aid

Net Official Development Assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare of ODA recipient countries and territories. It includes loans with a grant element of at least 25% (calculated at a discount rate of 10%). The ODA inflows are mainly targeted to support the government in promoting economic development and welfare of developing countries. Figure 7.32 shows that the country had successively increasing ODA and official aid, which could significantly support its budget balance and forex reserve and finally enhance its debt repayment capacity. The development assistance and aid towards Ethiopia reached a boom level of 5.3 billion USD, though it was in place to pull out the country from strong debt burden (See panel B of figure 2.32). In the previous two decades Ethiopia had the maximum ODA and official aid 5.31 billion USD in 2020, but the amount significantly reduced in the following years. However, the process was not consistent since the recent inflow was much lower compared to the amount before three to four years.

ODA is equivalent to 12% of national income, or USD 138 per poor person of Ethiopia (Development initiative, 2015). Domestic spending has grown but remains slightly below international flow. IDA is the largest donor to Ethiopia, giving mostly loans and equity, followed by the US and the UK. Cash grants are an important form of ODA to health, the largest single sector of ODA to Ethiopia, and to several other sectors.

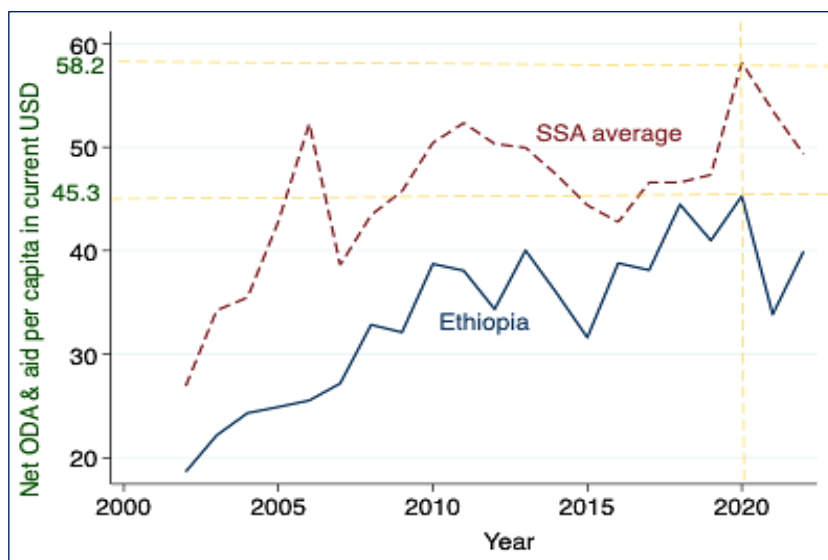
Figure 7.32: Pattern of net ODA and aid in million current USD



Source: Computed from data in the World Bank (2001-2022)

Compared to the per capita net ODA of Ethiopia, countries in SSA collected relatively large assistance in the previous two decades, but they were not free of debt burden or in fiscal balance surplus (Figure 7.33). The overall trend of per capita ODA in Ethiopia and SSA countries had similar movements, wherein the ups and downs were on similar fiscal years, however, the trend for SSA was relatively smoother. The figure below reveals that the Ethiopian government was relatively slower than the efforts made by SSA countries to attract more ODA in the previous two decades. The gap between the Ethiopian and SSA countries in attracting ODA implies that the Ethiopian government needs much more efforts and strategies to attract more ODA since it could play a vital role in supplementing the domestic sources of capital for the sustainable economic development, fiscal budget balance and on debt repayment capacity of the country.

Figure 7.33: Net ODA received per capita for Ethiopia and SSA (current USD)



Source: Computed from data in the World Bank (2001-2022)

7.7. Concluding Remarks

In the previous two decades (2002 to 2022), the nominal and real value of the government budget had a huge gap, which happened because of the successive inflation within the economy, then the respective fiscal year budget allocation should check the purchasing power and real value of the money.

Significant proportion (more than 88%) of the domestic public revenue of Ethiopia is sourced from taxes; however, the tax-to-GDP ratio of the country is relatively lower compared to other African countries. From 2008 to 2018, small islands and developing countries implemented tax policy and administration reforms, focusing on high-potential economic sectors, and these practices increased the average tax-to-GDP ratio from

23% to 25.1% (Talita *et al.*, 2022). In comparison with the average tax revenue potential utilization for the 30 African countries, Ethiopia had very low utilization level, while it had an economic progress in the previous two decades. Thus, efforts in the labor, technology and institutional set-up should be made to properly utilize its potential through widening the tax base and efficiently collect the revenue from the already identified sources. However, this effort should be made wisely to avoid the negative repercussions of high inflation.

In most of the fiscal years in the previous two decades, public expenditure of the country had a smooth and linear increment, which resulted in higher budget deficit that became larger in the previous five years especially after 2016. Hence, the MOF should be clairvoyant in its planning to avoid unexpected circumstances that exaggerate the public spending.

In the previous five years the proportion of recurrent spending of the country was going upwards drastically, which may be because of strong debt payment, civil war, instability and natural factors that force the government to shift some of the capital budget to recurrent ones. Thus, attention should be given to those circumstances, and the federal government should be courteous enough to redirect its expenditure from recurrent to capital.

Currently, Ethiopia is in “strong” debt stress compared to its export and public revenue, which implies that its export performance and revenue mobilization are not going parallel to the present value of the external debt. Thus, concerned ministries (Revenue, Finance, Planning and Economic Development, and Trade and Regional Integration), and authorities like Customs Commission of the government should have a coordinated effort to enhance the export and public revenue mobilization of the country.

Significant proportion of the outstanding debt of the country is sourced from the credits collected for managing highways, railways and communication services, especially under GTP I and II. Some of the projects have been delayed and a few of them have totally failed, which resulted in a huge debt burden on the country. Thus, the concerned government offices in managing projects should have well-organized and evidenced-based project plans, and a monitoring and evaluation process to finalize projects on time.

Ethiopia's debt policy rating effort is continuously reducing especially after 2020, and it was below the SSA countries' average in 2022. Hence, the federal government of the country should pay attention for its strategies and institutional set-ups to enhance the country's effectiveness regarding debt management policy.

References

- Africa Union. (2019). African Economic Outlook. Macroeconomic performance and prospects https://www.afdb.org/sites/default/files/documents/publications/aeo_2019-en_0.pdf
- Christopher S. A. and David L. B. (2003). Fiscal Deficits and Growth in Developing Countries. University of Oxford available at [https://users.ox.ac.uk/~cadam/pdfs/Fiscal Deficits and growth.pdf](https://users.ox.ac.uk/~cadam/pdfs/Fiscal_Deficits_and_growth.pdf)
- Development Initiative. (2015). Investment to end poverty Chapter 10, available at <https://devinit.org/wp-content/uploads/2015/02/Investments-to-End-Poverty-Chapter-10.pdf>
- Ezekiel O. A., James T. D., and Rotimi A. O. (2023). Fiscal deficit in Sub-Saharan Africa: A new intuition from the institution and political drivers [file:///Users/eea/Downloads/journal.pone.0291150%20\(2\).pdf](file:///Users/eea/Downloads/journal.pone.0291150%20(2).pdf)
- Fabio Comelli, Peter Kovacs, Jimena Jesus Montoya Villavicencio, Arthur Sode, Antonio David, and Luc Eyraud. (2023). Navigating Fiscal Challenges in Sub-Saharan Africa. IMF eLIBRARY <https://www.elibrary.imf.org/view/journals/087/2023/007/article-A001-en.xml>
- International Monetary Fund (IMF). (2018). The Debt Sustainability Framework (DSF) for Low-Income Countries, 2018, available at. <https://www.imf.org/external/pubs/ft/dsa/lic.htm>
- _____. (2023). Sub-Saharan Africa's Regional Economic Outlook, available at <https://mediacenter.imf.org/news/imf---sub-saharan-africa-s-regional-economic-outlook>
- Ministry of Finance (MOF). (2021). Annual Public Sector Debt Portfolio Analysis For The Year 2020/2, available at [https://www.mofed.gov.et/media/filer_public/da/3f/da3f3cc8-5358-438b-91cc-b46cb2f3b104/1final ethiopias dpa no 22 2021 1.pdf](https://www.mofed.gov.et/media/filer_public/da/3f/da3f3cc8-5358-438b-91cc-b46cb2f3b104/1final_ethiopias_dpa_no_22_2021_1.pdf)
- _____. (2021). Macro-Fiscal performance in Ethiopia and recent fiscal developments

- https://www.mofed.gov.et/media/filer_public/44/33/44336247-02d5-499b-91f1-3427f8db22ed/final_macro-fiscal_performance.pdf
- Ministry of Finance (MOF). (2023). Public sector debt statistical bulletins, available at <https://www.mofed.gov.et/resources/bulletin/>
- _____. (2023). Macro-Fiscal Performance in Ethiopia and Recent Fiscal Policy Developments. No. 04/2032.
- National Bank of Ethiopia (NBE), 2023, Annual-Report-2022-2023. <https://nbe.gov.et/wp-content/uploads/2024/08/Annual-Report-2022-2023.pdf>
- OECD (Organization for Economic Co-operation and Development). (2023). Revenue Statistics in Africa, 2023, available at <https://www.oecd.org/ctp/tax-policy/revenue-statistics-africa-nigeria.pdf>
- Talita Yamashiro Fordelone, Piera Tortora, and Jingjing Xia. (2022). Recovering from COVID-19: How to enhance domestic revenue mobilization in small island developing states.
- Tesfamlak Gizaw, Zerihun Getachew and Malebo Mancha. (2024). Sectoral allocations of domestic credit and their effects on economic growth in Ethiopia. Cogent Economics & Finance Volume 12, 2024 -Issue 1 <https://www.tandfonline.com/doi/full/10.1080/23322039.2024.2390949#abstract>
- UDNP. (2022). Quarterly Economic Profile of Ethiopia July 2022. <https://www.undp.org/sites/g/files/zskgke326/files/2023-03/QEPE%20JULY%202022.pdf>
- _____. (2024). Ethiopia, Quarterly Economic Profile January 2024 available at https://www.undp.org/sites/g/files/zskgke326/files/2024-02/undp_quarterly_economic_profile_january_2024.pdf
- UNECA. (2007). The debt burden of Developing countries: the African perspective <https://repository.uneca.org/handle/10855/6010>
- World Bank Group. (2023). Report on debt of the developing countries, <https://www.worldbank.org/en/news/press-release/2023/12/13/developing-countries-paid-record-443-5-billion-on-public-debt-in-2022>

8. STATE OF THE LABOR MARKET

8.1. Introduction

Ethiopia's labor market is currently undergoing a transformation from being primarily agricultural-based to being a mixed agriculture-industrial economy. This is reflected in the changing demands of the labor market for medium- and highly skilled workers. Ethiopia's economy is growing, but there remains a large domestic labor pool that is not being efficiently connected to employment. In other words, the country's labor market has the potential to absorb larger numbers of low- and medium-skilled labor, as well as an apparent growing demand for highly skilled labor. Ethiopia also has infrastructural and port access challenges (as Ethiopia is a landlocked country and relies on Djibouti for port access) as well as a skills gap. Indeed, there are several factors contributing to and challenging Ethiopia's shift from an agrarian to an industrial economy. In particular, emerging trends in government and Foreign Direct Investment (FDI) in education, job generation, and overseas employment provide clues as to the current and future opportunities not only for Ethiopians who wish to stay home and work but also for those who choose to travel abroad.

8.2. Methodology

8.2.1. *Data sources*

This chapter delves into the Ethiopian labor market landscape, and labor and population policy, drawing insights from secondary sources

We utilized data from the ESS's most recent rounds of the Labor Force and Migration Survey (LFMS) conducted in 2013 and 2021. These nationally representative surveys provide a comprehensive picture of the Ethiopian workforce. It allows us to analyze labor force participation, employment rates, unemployment levels, and the

economic dependency ratio across various segments. These segments include regions, urban and rural areas, different age groups, and gender.

Data related labor markets are obtained from the ILO. It enables us to track key labor market variables over extended periods. This historical context adds valuable depth to the analysis and complements the insights gleaned from the ESS data. By combining these datasets, we can paint a more nuanced picture of trends and developments within the Ethiopian labor market.

Furthermore, a comprehensive review of policy documents, proclamations, and relevant studies was conducted to understand the current state of labor and population policies in Ethiopia. This review was conducted to shed light on existing initiatives, identify areas for improvement, and inform the development of more effective strategies.

8.2.2. Definition of key variables

Gender Wage Gap (GWG): is measured as the gap between the average wage level of all women and all men working in the labor market for a salary, hourly, or daily wage. It is calculated by subtracting the average wage level for women from that of men and then dividing the remainder by the average wage level of men

Skill level: is defined as a function of the complexity and range of tasks and duties to be performed in an occupation. Following the ILO (2013) approach, skill levels are classified as high (3 and 4), medium (2), and low (1). Accordingly, managers, professional technicians and associated professionals are classified as high-skill level; clerical support workers, services and sales workers, skilled agricultural workers, craft and related workers, and plant and machine operators are grouped as medium skill while elementary occupations are labeled as low skill.

Economic Dependency Ratio (EDR): It is approximated by the average number of economically dependent population per 100 economically productive population. Economically dependent population is defined as the sum of the population under 15 years of age plus the population 65 years of age and over; an economically productive population is defined as the population between 15 and 64 years of age.

Active population: Refers to individuals who are either working (employed) or actively seeking work (unemployed). Those who are neither employed nor searching for a job are not considered to be in the labor force.

Labor Force Participation (LFP): Refers to the percentage of the working-age population that is actively engaged in the labor market, either employed or actively seeking employment.

8.2.3. *Data analysis*

The analysis employed in this chapter takes a descriptive approach, with a particular focus on trend analysis and changes in percentages over time. By meticulously tracking these changes, the chapter aims to identify key growth patterns, emerging trends, and potential challenges that the Ethiopian labor market faced in the past few years. This data-driven approach allows us to not only understand the current state of the labor market but also anticipate its future trajectory.

8.3. **Population and Labor Force Policies**

8.3.1. *Population policy*

The Ethiopian government established its first comprehensive, multi-sectoral population policy in 1993 (FDRE, 1993). This policy, a significant marker of Ethiopia's approach to population issues, aimed to achieve a crucial balance by aligning population growth with economic

development to ensure Ethiopia's resources could sustainably support its people. The National Population Policy (NPP) aimed to slow population growth to a rate that would allow the economy to develop and provide a good quality of life for all Ethiopians. Furthermore, the NPP aimed at fostering social and economic well-being for the nation's citizens. The policy recognized that population issues are intertwined with social and economic development. By improving education, healthcare, and economic opportunities, particularly for women, the NPP aimed to empower Ethiopians to make informed choices about family planning.

Along with the promulgation of the population policy, a number of sector-specific policies and programs have been designed and adopted, as a result of which the country has made steady progress in expanding access to education and health services, gender equity, equality and women empowerment and economic growth and development. Accordingly, significant progress was made towards meeting many of the objectives of the policy.

Specific policies and programs were designed and implemented, leading to a wave of positive developments:

- Education: Access to education expanded significantly, equipping Ethiopians with the knowledge and skills necessary for a more prosperous future.
- Health services: The availability and quality of healthcare services improved, leading to better health outcomes for the population. This is crucial for a healthy and productive workforce.
- Gender equality and women's empowerment: The policy recognized the critical role of women in achieving sustainable development. Progress has been made in promoting gender equality and empowering women. By providing educational and

economic opportunities, women gain greater agency in family planning decisions, contributing to lower population growth rates.

- Economic growth and development: Ethiopia has witnessed a period of economic expansion, fueled in part by a more skilled and healthier workforce. This economic growth creates a virtuous cycle, generating resources to invest back into education, healthcare, and infrastructure, further improving the lives of Ethiopians.

However, despite the significant progress, challenges remain that hinder full policy implementation. Examining these ongoing and emerging hurdles is critical for continued success:

- Lack of legal basis: Ethiopia's NPP established population offices at both national and regional levels. These offices were intended to be the driving force behind the policy's implementation, equipped with leadership skills to coordinate and guide activities across different sectors. However, a major flaw was that the offices lack a legal foundation. This means they operate in a sort of limbo, without official recognition. Consequently, they struggled to secure essential resources like funding, staff, and equipment. Furthermore, the absence of a defined structure weakened their ability to effectively coordinate policy efforts across different sectors. This lack of legal backing significantly hindered the population offices' ability to function as intended, ultimately impacting the overall success of the policy (Hailemariam et al, 2011).
- Failure to establish the National Population Council (NPC): A key missing piece in Ethiopia's NPP was the NPC. This council, envisioned to be chaired by the Prime Minister, was intended to be the central hub for the policy's success. The NPC's role was

developing specific population and development programs across various sectors, fostering collaboration between different government departments to avoid conflicts, and providing guidance for implementing the policy. Unfortunately, the NPC remained just an idea on paper. This absence has left the government without a powerful, well-structured office to drive program development and policy coordination. Without the NPC, ensuring proper attention is given to population policy implementation across various levels of government becomes a challenge that further weakens the overall effectiveness of the initiative (Hailemariam et al, 2011; Minas, 2008).

- Inadequate integration of population variables into socio-economic development planning: Ethiopia's NPP aimed to integrate population trends into development planning. Ideally, this would involve assessing how development programs impact population dynamics and vice versa. However, weaknesses exist in this system. Reliable demographic data is scarce, along with a clear understanding of how population changes affect development. Additionally, lack of trained personnel, proper institutional structures, and dedicated resources hinders effective integration. These shortcomings make it difficult to achieve a balanced approach where development plans account for population dynamics and vice versa.
- No comprehensive population program: The Ethiopian NPP envisioned a comprehensive program with detailed multi-sectoral strategies to guide implementation. Unfortunately, this crucial element has not materialized. Neither the NPP nor its regional counterparts have developed these comprehensive plans. While some sectors and regions have made individual attempts, the progress is uneven. The lack of a clear and detailed roadmap for

full implementation weakens the policy. Without a concrete plan outlining the necessary steps, it is difficult to secure sustained political commitment and to mobilize resources for effective action.

- **Absence of a monitoring and evaluation framework:** A critical gap in Ethiopia's NPP is the lack of a monitoring and evaluation system. This system would be essential for measuring the policy's progress, effectiveness, and overall impact. Unfortunately, neither the national nor regional offices have established such a framework. This means there's no systematic way to track the policy's implementation, identify challenges, or assess its success. Without this crucial feedback loop, it's difficult to determine if the policy is achieving its goals, hindering course correction and adaptation as needed.
- **Budgetary constraints:** Ethiopia's NPP faces a significant financial hurdle. Government budgets for population programs were insufficient, and there was little effort to encourage private sector investment. While international support from agencies like United Nation Fund for Population Activities (UNFPA) and United States Agency for International Development (USAID) has been crucial, these funds were often unreliable due to budget cuts and delays. Furthermore, even when funds are allocated, limitations in utilizing them effectively can lead to further reductions in future budgets. This lack of consistent and adequate financial resources significantly hinders the implementation of population programs across the country.
- **High population density and resource pressure in rural areas:** Increasing crude population density combined with farmland shortage, fragmentation of land holdings and lack of alternative

employment opportunities are the main push factors for the increase in rural-to-urban migration.

The NPP, which was established in 1993, no longer aligns with the country's current socio-economic landscape. This outdatedness has created challenges for policymakers trying to effectively plan for development efforts. Recognizing this need for an update, the Ethiopian government has initiated a revision process for the NPP. The goal is to create a policy that better reflects the country's rapid population growth and its impact on economic planning. The revised NPP is expected to encompass a broader range of topics beyond just population. This includes demographic structure, population distribution and urbanization, population and environment, employment opportunities, gender equality, and overall human development. Unlike the previous population policy, the population policy currently in the making should have active stakeholder engagement, and should put in place strong monitoring and evaluation mechanisms.

The Ministry of Planning and Development is leading the revision effort, aiming to finalize the updated policy by 2025. This timeframe aligns with the halfway point of Ethiopia's Ten-Year Development Plan, ensuring the revised NPP can effectively guide future development strategies.

8.3.2. *Labor Policy*

Ethiopia first launched its National Employment Policy and Strategy (NEPS) in 2009. The NEPS aimed to tackle unemployment and poverty by promoting decent work opportunities by creating productive jobs with good working conditions, effectively utilizing Ethiopia's workforce, and creating a stable social environment. The policy recognized that unemployment can lead to unrest.

The NEPS was later updated and endorsed by the Council of Ministers in 2016. The updated version of NEPS prioritized a number of key areas including creating a sufficient number of quality jobs, improving access to information for both employers and employees, supporting the transition of informal workers into the formal economy, and promoting cooperation and resolving disputes to maintain a peaceful work environment. The policy was guided by principles like non-discrimination, adherence to labor standards, and social dialogue. It was implemented through a national employment council involving various stakeholders, including government bodies, worker and employer associations, and the informal sector.

The Ethiopian Labor Proclamation No. 1156/2019 marks a revision to the country's existing labor law. This update aims to address changes in the way Ethiopians work, and the environment businesses operate in. The proclamation introduces several new benefits for employees, including longer maternity leave, paternity leave, and annual leave. It also establishes a 'Wage Board' to set minimum wages and increases some overtime pay. Additionally, the proclamation strengthens protections against sexual harassment and violence for workers. However, critics argue that these revisions are not enough. The new law maintains many of the existing restrictions on employers' ability to terminate contracts, limiting flexibility in employment agreements. It also applies the same labor rules across all industries, which some argue fails to consider the specific needs of different sectors.

This past May 2024, a draft bill was submitted to the Ethiopian Parliament proposing the establishment of a "Merit and Wage Board." This board would be responsible for determining and approving salary adjustments for civil servants. This move aligns with the 2019 labor proclamation, which laid the groundwork for a 'Wage Board' tasked with regularly updating and setting minimum wages for both public and

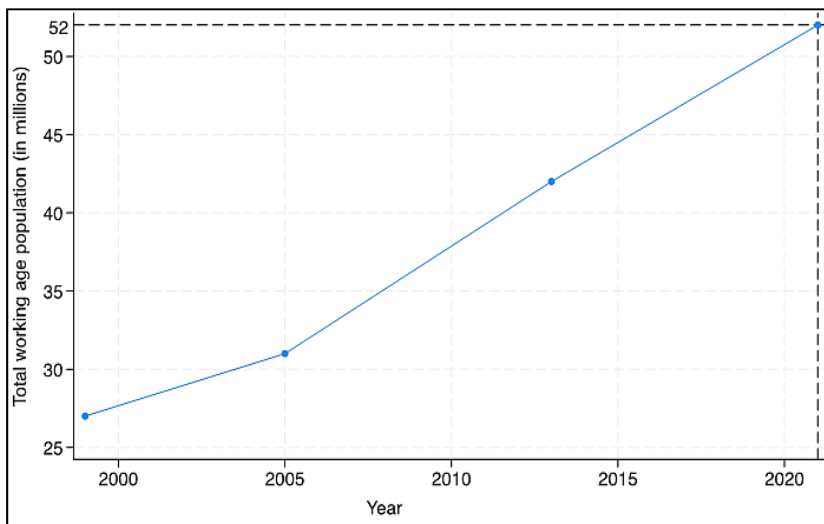
private sector employees. While the latest legislation focuses on creating a board for civil servants, it remains unclear whether a separate wage board will be established specifically for private sector employees.

8.4. The Labor Force

8.4.1. Working age population

Ethiopia's working-age²⁵ (15-64) population has undergone a remarkable increase over the past two decades (see Figure 1 below). In 2000, the total number of people within this age range stood at roughly 27 million. By 2021, that figure had jumped to a staggering 52 million, representing a growth of 92%. This significant increase suggests a rapidly expanding workforce with the potential to drive economic development.

Figure 8.1: Total working age population

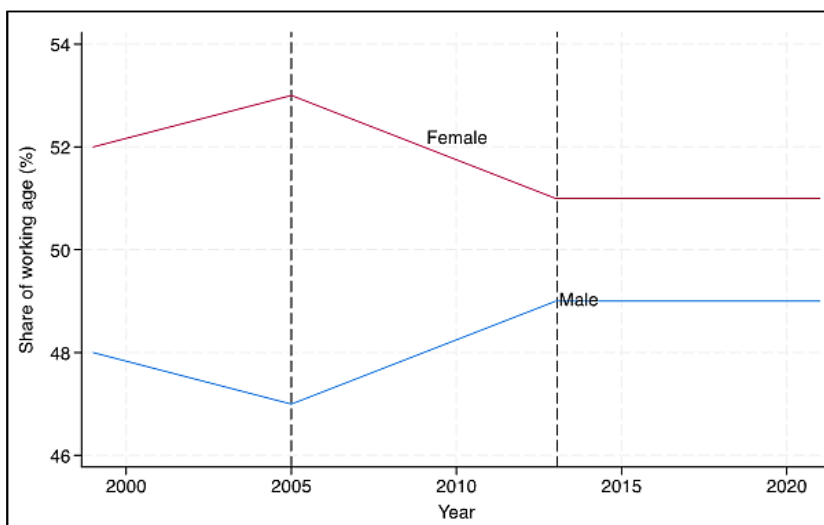


Source: Computed from data in ILO (2000-2021)

²⁵ The working age population is defined as those aged 15 to 64

Figure 8.2 shows that the share of female working age is consistently higher than their male counterparts. While both males and females within the working-age range have experienced growth, it is important to note that the female population aged 15 to 64 has historically been higher. Females share more than 51% of the working-age population consistently between 2000-2021. However, it is important to note that this data only reflects the size of the working-age population, not necessarily the number of people actively employed, which is presented in the subsequent sections.

Figure 8.2: Working age population by gender (%)



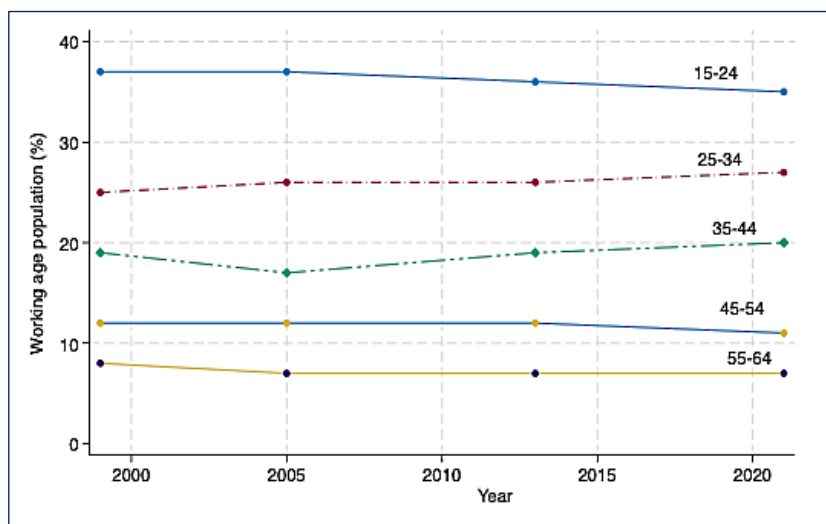
Source: Computed from data in ILO (2000-2020)

Ethiopia's working-age population has witnessed a surge across all age groups over the past two decades. However, a closer look reveals a fascinating trend. While there has been an increase in all categories, the growth has been significantly more pronounced among younger age groups (15-24 and 25-34). This younger segment of the workforce has

consistently accounted for more than 60% of the total working-age population throughout the period studied.

This phenomenon, known as a youth bulge, presents both opportunities and challenges. The large pool of young workers signifies a potential demographic dividend. With proper investment in education and skills training, this youthful population can fuel economic growth and innovation. On the other hand, if this youth bulge remains unskilled or underemployed, it could lead to social unrest and economic stagnation. Therefore, Ethiopia must focus on creating job opportunities and providing relevant skills training to this young demographic to harness the full potential of this demographic shift.

Figure 8.3: Working age population by age group (%)

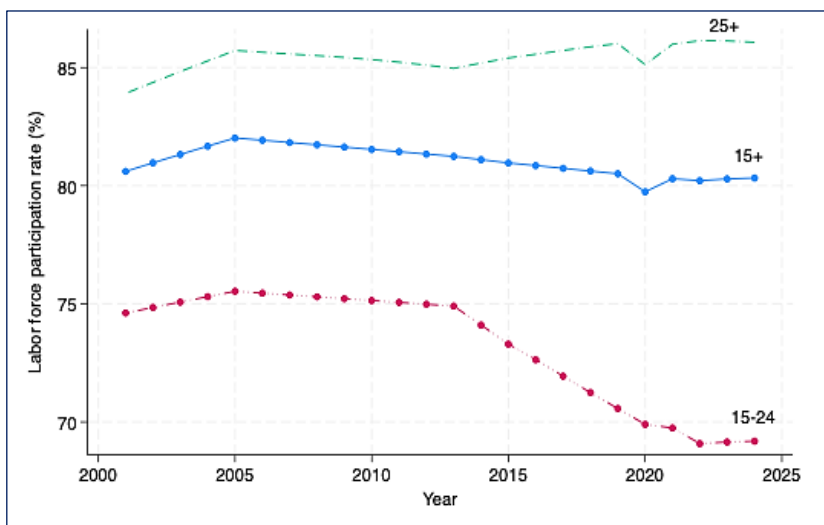


Source: Computed from data in ILO (2000-2020)

8.4.2. Labor force participation

Figures 8.2 and 8.3 provided valuable insights into Ethiopia's growing working-age population, broken down by gender and age group, respectively. This demographic shift highlights a potential abundance of human capital. However, simply knowing the size and age distribution of this population is not enough. To understand the true picture of Ethiopia's labor market, we need to delve deeper and explore labor force participation. This metric provides a clearer picture of the actual workforce available to contribute to the economy. It indicates the size of the supply of labor available to engage in the production of goods and services, relative to the population at working age. The breakdown of the labor force (known as the economically active population) by sex and age group gives a profile of the distribution of the labor force within a country.

Figure 8.4: Labor force participation rate (%) by age group



Source: Computed from data in ILO (2000-2024)

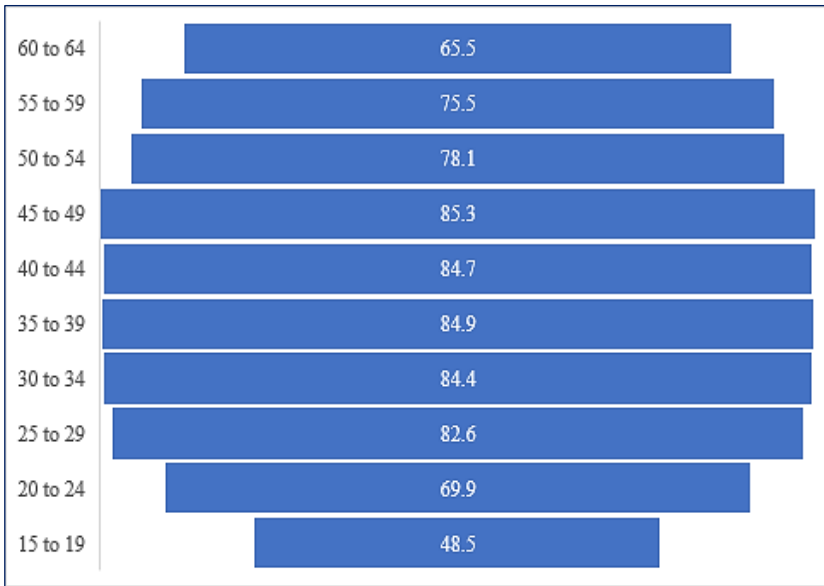
Figure 8.4 reveals a divergence in labor force participation rates between younger and older demographics. While the working-age population for those aged 15-24 has shown a continuous increase, their labor force participation has exhibited a declining trend, particularly after 2013. On the contrary, the number of new graduates from higher institutions has been increasing over the last decade (Yimer et al., 2024). The decline in youth labor force participation (15-24 years old) could be attributed to challenges transitioning from education to employment. On the other hand, the participation rate for individuals aged 25 and above appears to be on the rise. This upward trend, from around 82% in 2000 to over 85% in 2024, suggests a growing engagement of experienced workers in the labor market. Interestingly, the overall labor force participation rate for those aged 15 and above has not changed significantly between 2000 and 2024. This stagnation suggests the decline among youth is offset by the rise in older worker participation, resulting in a net stall in the national rate.

Looking deeper into labor force participation by age groups, a fascinating pattern emerges: an inverted U-shaped curve (Figure 8.5). Low participation at early ages (15-19 years old) is likely due to ongoing education. As people enter their prime working age, participation increases steadily. This reflects a focus on building careers and families. For the most productive age groups (typically from 25 to 49 years old), labor force participation remains high, often exceeding 80%. This reflects the accumulation of experience, skills, and work ethics during these years. After reaching its peak, participation starts to decline after 45-49 years old. This could be due to factors such as individuals choosing to reduce work hours for family or personal pursuits, health concerns limiting full-time work, or a gradual transition towards retirement in their late fifties and sixties. Several studies have documented this argument. For example, Goldin (1995) explored the relationship between age and female labor force participation, finding

a U-shaped pattern. The ILO (2013) also observed this U-shaped relationship. More recently, Uberti and Douarin (2023) further contributed to this body of research by confirming the U-shaped relationship between female labor force participation and age.

Bourmpoula, V et al (2013) have also obtained a U-shaped relationship between age group and labor force participation. Uberti and Douarin (2023) also contributed to this body of research by revealing U-shaped relationship between female labor force participation and age group.

Figure 8.5: Labor force participation by age group



Source: Computed from data in ESS (2021)

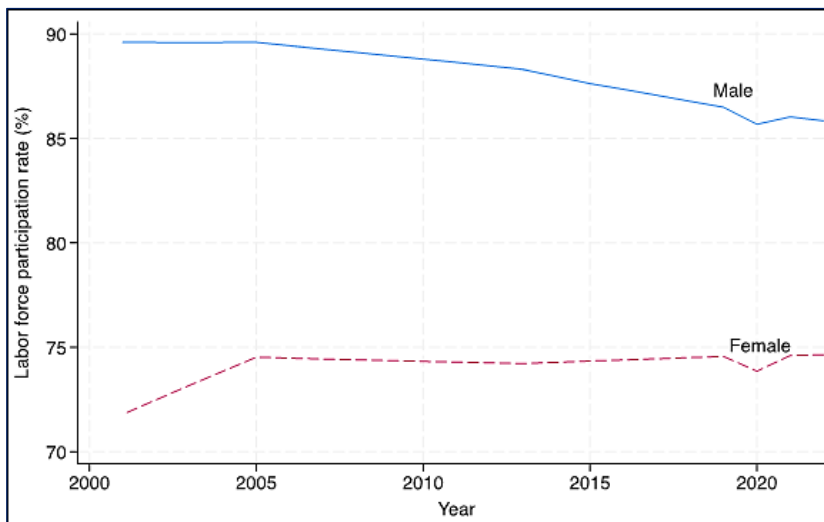
Labor force participation by sex in Ethiopia reveals a persistent gender gap (Figure 8.6). In 2000, close to 90% of males within the working-age group were actively participating in the labor market. This high rate has shown a slight decline, reaching around 86% by 2021. In stark

contrast, female labor force participation has historically been much lower, remaining below 75% throughout the entire period considered. However, there is a glimmer of hope with a recent upward trend.

This significant difference in participation rates between men and women highlights the need to explore the underlying reasons. Some potential factors contributing to the gender gap could be traditional gender roles that discourage women from entering the workforce or limit the types of jobs they can pursue. For instance, the burden of childcare often falls on women, limiting their ability to participate fully in the workforce; unequal access to land ownership could also restrict women's economic opportunities, particularly in rural areas. Several studies, including those by the ILO (2024), Sangwan and Kumar (2021), and UN ESCAP (2022), have documented the negative impact of unpaid care work and household responsibilities on women's participation in the labor force.

The recent increase in female labor force participation is encouraging. This could be due to increased girls' education as girls are attending school, potentially leading to higher female qualifications and employability. And government policies promoting female education and employment opportunities might be playing a role. There is also an increased awareness and shifts in social norms on female labor force participation.

Figure 8.6: Labor force participation rate by sex



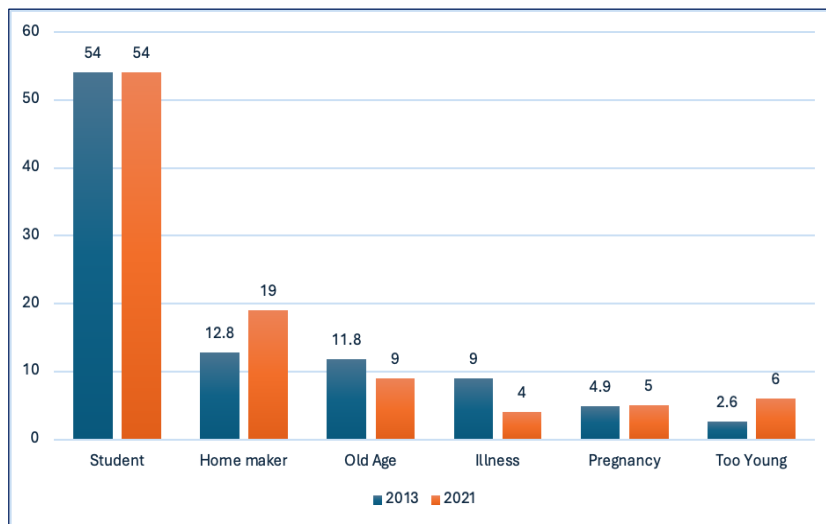
Source: Computed from data in ILO (2000-2021)

8.4.3. Reasons for not participating in the labor market

As discussed above, the labor force participation rate in the country is about 86% for those aged 25 and above in 2024. This is slightly less than the average for Sub-Saharan African countries (87%) and that of Kenya (90%). Several factors likely contribute to lower labor force participation in Ethiopia.

Figure 8.8 sheds light on some key challenges, particularly for women. The data suggests that housework and pregnancy are significant barriers specifically for female labor force participation. Housework and childcare responsibilities, especially during pregnancy, often become primary burdens for women. This limits their time and energy available for formal employment. These factors do not show change over time with being a student and housework playing a significant role in limiting labor force participation.

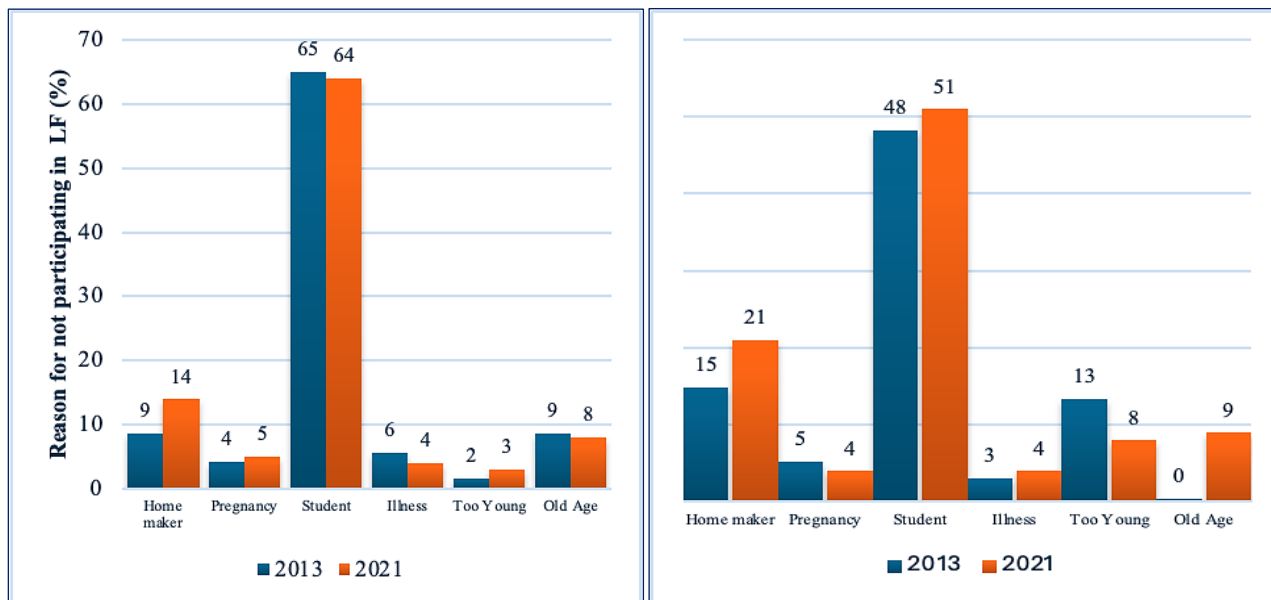
Figure 8.7: Reasons for not participating in the labor market



Source: Computed from data in ESS (2013, 2021)

While both housework and being a student limit female labor force participation in Ethiopia, the data reveals a significant difference between urban and rural areas. In rural communities, housework emerges as the primary constraint for women entering the workforce, compared to their urban counterparts. This disparity can be attributed to several factors. Firstly, many rural families rely on subsistence agriculture. This necessitates a substantial amount of unpaid labor from women, who are responsible for household chores and food production. Secondly, rural areas often lack access to childcare facilities and labor-saving technologies, further intensifying the burden of housework on women and limiting their opportunities for formal employment.

Figure 8.8: Reason for not participating in the labor force (Urban left and Rural-right panel)



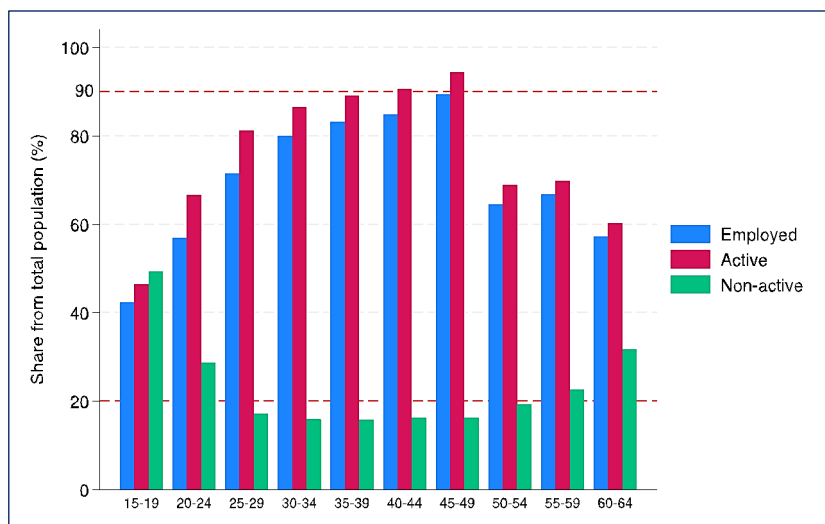
Source: Computed from data in ESS (2013, 2021)

8.5. Employment

8.5.1. Overall employment situation in Ethiopia

Figure 8.9 sheds light on the distribution of employed, unemployed, and inactive populations across different age groups in Ethiopia. A significant portion of the youngest age group (15-19 years) falls outside the labor force, with activity rates of 49%. This could be mainly because this age group typically focuses on education, spending their time in schools and not actively participating in the labor market. From the age of 20 onwards, the number of active individuals increases steadily. This suggests that people enter the workforce as they complete their education and transition into working lives. The trend reverses after the sixties, with the non-active population increasing again. This can be attributed to factors like retirement and individuals gradually withdrawing from the labor market.

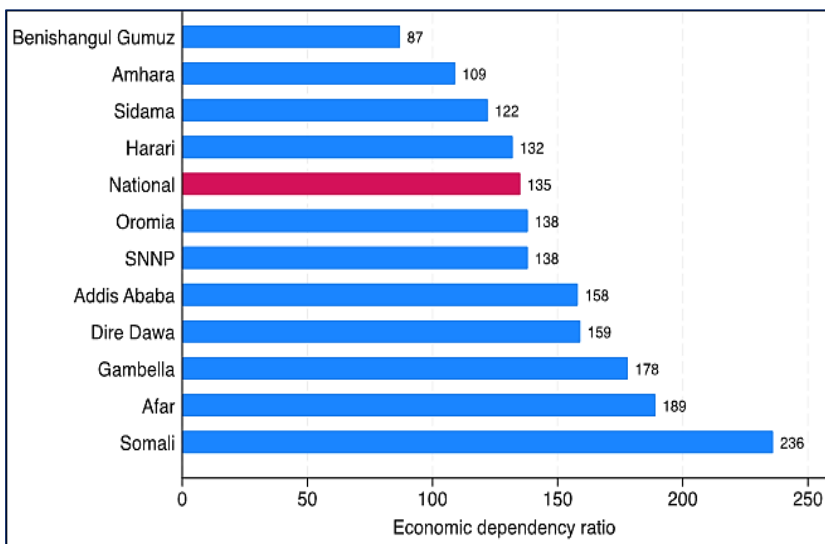
Figure 8.9: Employment and active population by age group



Source: Computed from data in ESS (2021)

In 2021, Ethiopia's national dependency ratio stood at 135. This signifies that for every 100 individuals in the working-age group, there are approximately 135 dependents, either young or old. Dependency ratios exhibit significant regional variations, ranging from 236 in the Somali region to a low of 87 in Benishangul-Gumuz. In simpler terms, the Somali region has 236 dependents for every 100 individuals in the working-age group, while Benishangul-Gumuz has a much lower dependency ratio of 87. This suggests that Benishangul-Gumuz has a proportionally smaller dependent population compared to the national average and most other regions.

Figure 8.10: Economic dependency ratio by region



Source: Computed from data in ESS (2021)

However, it should be noted that the dependency ratio is a demographic indicator based on a population's age structure. It does not reflect true economic dependency because not everyone within the working-age

group actively participates in the formal economy. Conversely, some dependents, like children assisting on family farms, may contribute economically.

There is a significant presence of the informal²⁶ economy in Ethiopia's labor market in 2021 (Table 8.1). About 46% of the workforce is employed in the informal sector, while 49% hold formal jobs. The remaining 5% fall under an unidentified category. This highlights the substantial role the informal sector plays in providing employment opportunities in Ethiopia.

Concerning evidence emerges when we consider gender disparities. Men are considerably more likely to have formal jobs (54%) compared to women (42%). This suggests that women face more significant barriers in entering or securing formal employment opportunities. Understanding the reasons behind this gap is crucial for promoting gender equality in the workforce. The data also exposes a clear urban-rural divide in employment opportunities. Formal jobs are significantly more prevalent in urban areas (75%) compared to rural areas (34%). This disparity reflects the larger presence of established businesses and government institutions in cities, offering more formal employment options.

On the other hand, the informal sector dominates rural areas, employing a substantial portion of the workforce (60%). This could be attributed to factors such as concentration of agriculture. Rural areas often have a higher concentration of agriculture-related jobs, which are often informal. It could also be due to limited access to formalization mechanisms in rural areas. The process of formalizing businesses might be more complex or less accessible in rural regions, pushing many towards the informal sector.

²⁶ The informal sector comprises unincorporated household enterprises, as defined by the UN System of National Accounts (SNA Rev. 4), regardless of workplace, capital used, enterprise duration, or whether it's a primary or secondary activity.

Table 8.1: Employment by sector: Formal vs informal

Place and gender	Formal job (%)	Informal job (%)	Not identified (%)
<i>National</i>			
Total	49	46	5
Male	54	41	5
Female	42	54	5
<i>Urban</i>			
Total	75	21	4
Male	80	16	5
Female	67	30	3
<i>Rural</i>			
Total	34	60	6
Male	39	55	6
Female	28	66	6

Source: Computed from data in ESS (2021)

Table 8.2 offers a comprehensive analysis of employment distribution across various sectors in Ethiopia. It breaks down the data by gender and location (national, urban, and rural), revealing some key insights:

Nationally, self-employment reigns supreme, accounting for nearly half (49.86%) of all employment. This signifies a widespread presence of micro-businesses, often encompassing informal work, in Ethiopia. Additionally, unpaid work constitutes a significant portion (37.42%), potentially reflecting a large agricultural sector where family members contribute labor without formal wages. The combined share of salaried formal employment in sectors like government (5.83%), private (4.06%), and NGO (2.00%) is considerably lower compared to self-employment and unpaid work.

The data reveals a gender gap across sectors. Women are less likely to be self-employed compared to men nationally (18.35% vs. 31.52%). This could be due to limited access to capital or resources for women to start businesses. Conversely, women are more involved in unpaid work (19.47% vs. 17.95%), potentially reflecting traditional gender roles where they take on more household responsibilities. The formal employment sectors also show a gap, with men having a higher share in government, private, and NGO jobs compared to women.

Table 8.2: Private and government employment by residence

Category	Government	Private	NGO	Others	Self-employed	Unpaid Work ²⁷	Employer
<i>National</i>							
Total	5.83	4.06	2.00	0.69	49.86	37.42	0.13
Male	3.69	2.80	1.02	0.56	31.52	17.95	0.08
Female	2.15	1.26	0.98	0.13	18.35	19.47	0.04
<i>Urban</i>							
Total	22.22	15.14	6.48	2.05	39.91	13.76	0.44
Male	13.41	9.98	2.43	1.54	23.25	6.38	0.33
Female	8.81	5.16	4.05	0.51	16.67	7.38	0.11
<i>Rural</i>							
Total	1.87%	1.38%	0.92%	0.36%	52.27%	43.14%	0.05%
Male	1.34%	1.06%	0.68%	0.32%	33.52%	20.75%	0.02%
Female	0.54%	0.32%	0.24%	0.04%	18.75%	22.39%	0.03%

Source: Computed from data in ESS (2021)

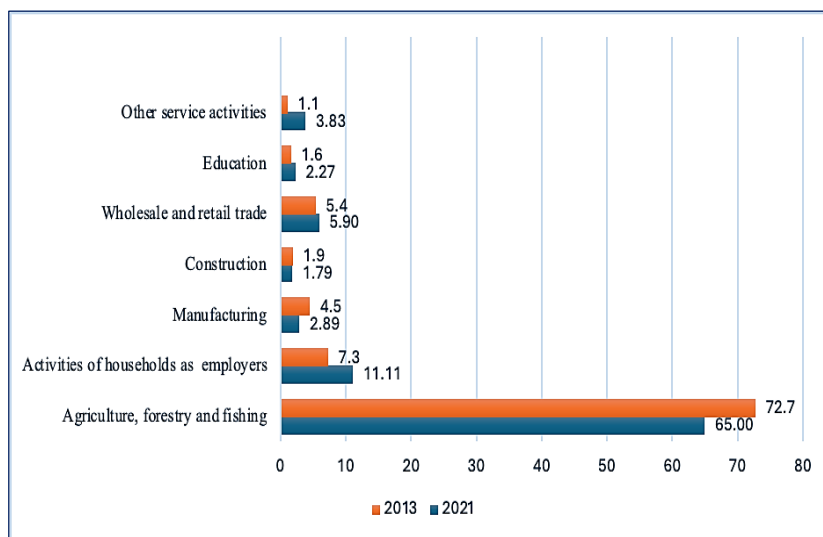
²⁷ Includes family work, voluntary and apprentices

Formal employment opportunities are significantly higher in urban areas compared to rural areas. This aligns with the presence of more established businesses and government institutions in cities. However, self-employment remains the dominant category in both locations. Interestingly, the percentage is higher in rural areas (52.27%) compared to urban areas (39.91%). This is likely due to a higher concentration of farm households engaged in agricultural activities and reported as self-employed in rural regions. Unsurprisingly, unpaid work is also substantial in both areas, but the percentage is much higher in rural areas (43.33%) compared to urban areas (13.76%). This highlights the larger role of family labor in agricultural production in rural settings.

8.5.2. Sectoral distribution of employment

Ethiopia's workforce has a distinct structure, with a clear concentration in a few key sectors. The most dominant by far are agriculture, forestry and fishing, employing a staggering 27 million people nationally in 2021. This translates to a whopping 65% of the entire national workforce. This dominance underscores the critical role agriculture plays in the Ethiopian economy, with millions relying on it for their livelihood (Figure 8.11).

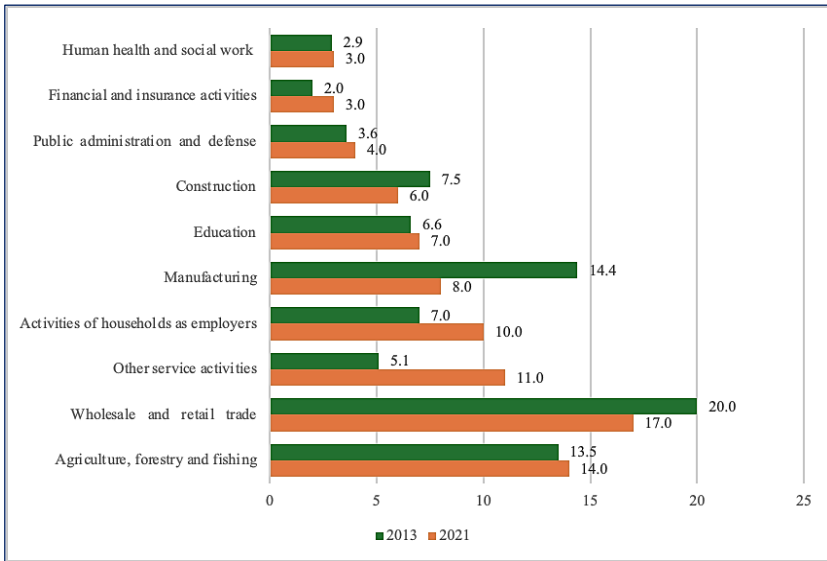
Beyond agriculture, other significant sectors include wholesale and retail trade, which likely encompasses many small businesses, and activities of households as employers. This latter category refers to informal work done by families, typically for their consumption rather than for market sale.

Figure 8.11: National employment by sector (%)

Source: Computed from data in ESS (2021)

Figures 8.12 to 8.13 reveal sectoral distribution of employment in both urban and rural areas. As reported in the figures, there is a clear difference in employment patterns between urban and rural areas. Rural areas have a significantly higher employment rate compared to urban areas. As expected, sectors like agriculture, forestry, and fishing employ a much higher number in rural areas which employ 83% and 77% of the labor force in 2013 and 2021, respectively (Figure 8.13). Conversely, sectors like wholesale and trade, manufacturing, and other services employ a large share of the urban labor force while agriculture related activities also employ a significant share of urban labor force (Figure 8.12).

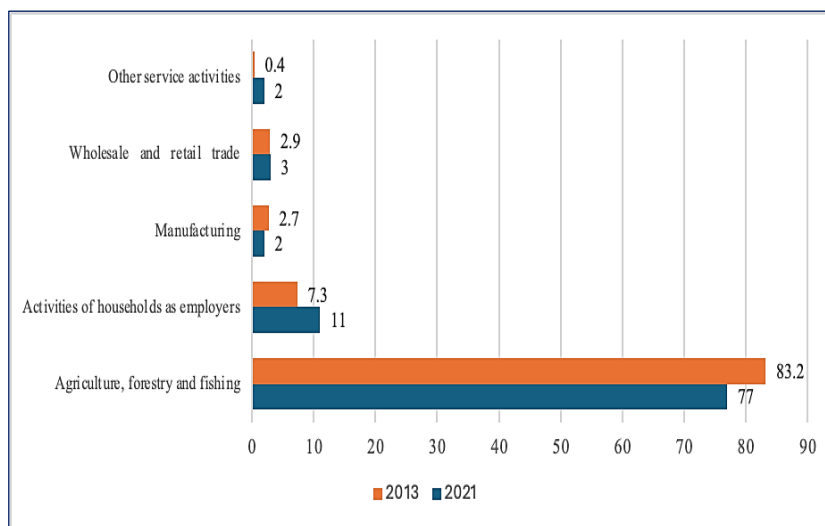
Figure 8.12: Urban employment by sector (%)



Source: Computed from data in ESS (2021)

The data also reveals a gender gap in employment across most sectors. Generally, there are more men employed than women. This is particularly evident in traditionally male-dominated sectors like construction and transportation and storage. However, some sectors show a higher share of women, such as education and human health, and social work activities.

Figure 8.13: Rural employment by sector (%)



Source: Computed from data in ESS (2021)

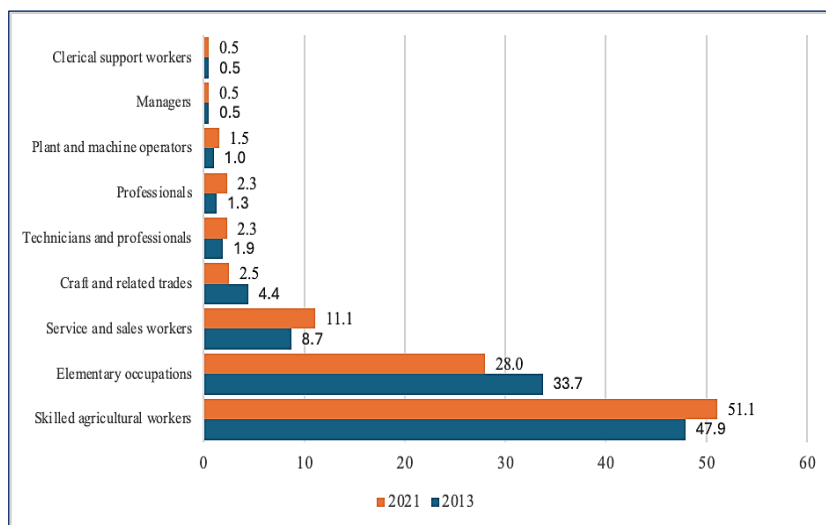
8.5.3. Employment by major occupation groups

The occupational composition of Ethiopia's workforce is presented in Figures 14-15. Unsurprisingly, skilled agricultural, forestry and fishery workers are the most prominent group, employing over 48% of the labor force in 2013. This has increased to 51% in 2021. This reinforces the critical role agriculture plays in the Ethiopian economy, with a significant portion of the population relying on it for their livelihood.

While agriculture remains a major source of employment, there is also a substantial workforce in professional and technical roles. Professionals and technicians and associate professionals together account for nearly 2 million employed individuals (3% of the workforce) in 2021 which increased from 2% in 2013, highlighting a growing need for skilled workers in various sectors. Elementary occupations, encompassing a range of basic jobs, employ a significant

number of people (over 11 million), representing 28% of the workforce in 2021. Managers are a relatively smaller group compared to the overall workforce, suggesting a centralized management structure in many organizations.

Figure 8.14: Employment by occupation (%)



Source: Computed from data in ESS (2013, 2021)

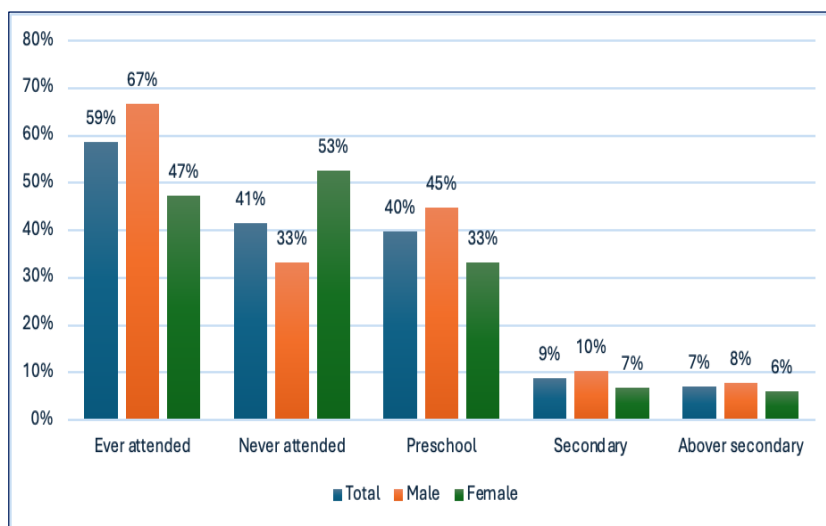
There is also a gender gap in several occupational groups. Traditionally male-dominated fields like craft and related trade workers and plant and machine operators, and assemblers show a significantly higher number of men employed. Conversely, clerical support workers and service and sales workers have a higher proportion of women.

Finally, before concluding the section, we looked at the educational characteristics of employed workers. A significant concern is that 41% of the workforce never attended any formal schooling. The majority of this workforce is in rural areas where agriculture remains the dominant sector for these workers with lower educational attainment. The data

reveals a persistent gender gap in education. Women are considerably less likely to have attended school compared to men (53% vs. 33%). This gap persists across most educational levels, potentially affecting job opportunities for women.

Among those who have attended school, the majority (40%) only completed primary education, while only 7% of the workforce has attained education above the secondary level, indicating a potential skills gap in the Ethiopian labor market.

Figure 8.15: Educational attainment of employed labor force by sex (%)



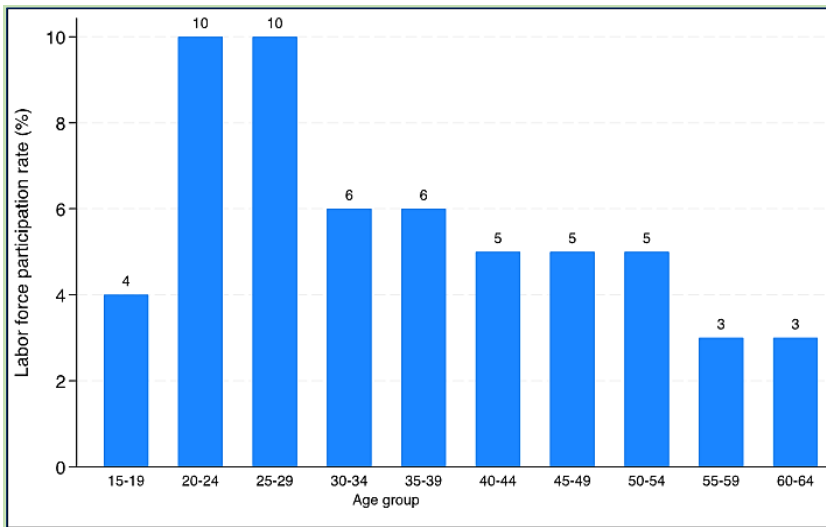
Source: Computed from data in ILO (2021)

8.6. Unemployment

Figure 8.16 depicts the unemployment rate in Ethiopia across various age groups. It reveals a trend where unemployment is highest among young adults and gradually decreases with age. Youth, specifically those between 15 and 24 years old, face the toughest hurdle in finding

employment. The unemployment rate reaches a peak of 10% within this age range, indicating a significant number of young adults struggling to enter the workforce. As people gain experience and move into their late 30s, the unemployment rate dips to 6%. This suggests that accumulating experience improves employability. The data further shows a consistent unemployment rate of around 5% for those between 40 and 54 years old. This might indicate a period of stable employment for established professionals. The unemployment rate rises slightly again for people aged 55 to 59, reaching 3%. This could be due to factors like ageism or a skills gap between older workers and evolving job requirements.

Figure 8.16: Unemployment rate by age group

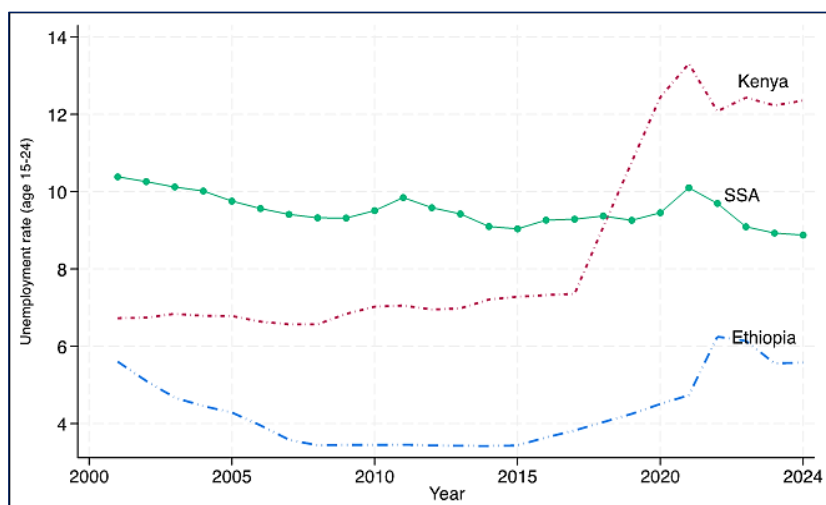


Source: Computed from data in ESS (2021)

Additionally, we examined unemployment in Ethiopia by age group, following classifications by the International Labor Organization (ILO). The data highlights a troubling pattern of high unemployment among young Ethiopians, especially those between 15 and 24 years old. As Figure 8.17 illustrates, this age group consistently faces the greatest

difficulty securing employment. Youth unemployment has been on the rise since 2013, with a decline starting only after 2021. However, it remains lower than both the sub-Saharan African average and Kenya's youth unemployment rate throughout the analyzed period. This could be due to Ethiopia's strong agricultural sector, where many young people contribute as family labor in rural areas.

Figure 8.17: Trends in the youth unemployment rate (%) (aged 15-24)

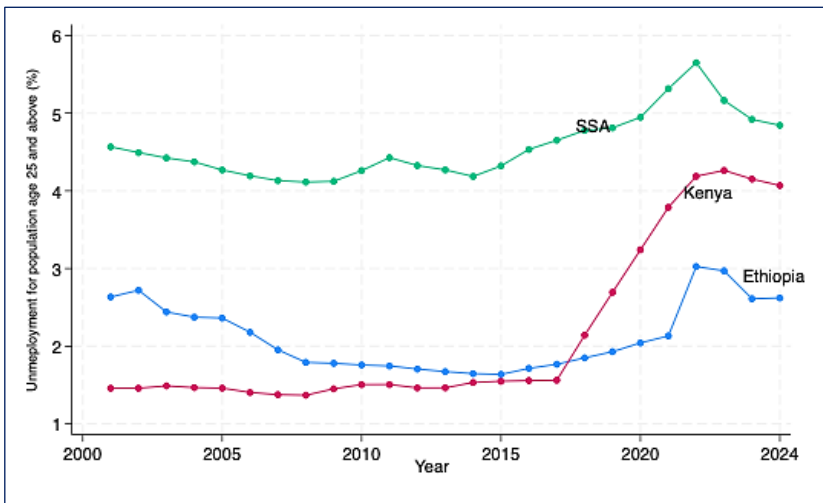


Source: Computed from data in ILO (2000-2024)

The analysis of unemployment rates in Ethiopia reveals a clear distinction between younger and older workers. The data consistently shows a lower unemployment rate for those aged 25 and above compared to the youth group (15-24). This suggests that experience and skills acquired through work significantly improve employability. While the specific unemployment rates differ across age groups (15 and above) in Figure 8.16, they all seem to follow a similar trend. This points towards a potential underlying factor affecting the entire workforce, such as fluctuations in the national economy or significant shifts within the job market itself.

Further analysis reveals a positive trend for Ethiopia's adult unemployment rate (25 years and above) when compared to sub-Saharan Africa and neighboring countries like Kenya. In recent years, particularly after 2017, Ethiopia's adult unemployment rate has been considerably lower. For example, in 2024, the adult unemployment rate in Ethiopia sits at 2.6%, while Kenya and the sub-Saharan African average stand at 4% and 5%, respectively. This suggests that Ethiopia might be experiencing a more positive economic trajectory or have a labor market structure that benefits experienced workers compared to its regional counterparts.

Figure 8.18: Trends in adult unemployment rate (%) (aged 25 and above)



Source: Computed from data in ILO (2000-2024)

A recent national labor force survey by the Ethiopian Statistical Services (ESS) paints a concerning picture of unemployment in Ethiopia. The overall rate stands at 8%. However, the data reveals significant disparities based on gender and location. Women face a considerably higher unemployment rate (12%) compared to men (5%).

This gender gap persists across the country, suggesting women encounter greater challenges in finding work.

There is also a clear difference in unemployment rates between urban and rural areas. Urban areas have a much higher rate (18%) compared to rural areas (5%). This could be due to a larger pool of job seekers exceeding available jobs in urban centers. Interestingly, the gender gap widens further in urban areas. Here, women face a staggering unemployment rate of 25%, while the rate for men is just 11%. This suggests urban job markets present unique challenges for women. While the overall unemployment rate is lower in rural areas (5%), a significant portion of the workforce here is employed in agriculture. This sector might offer limited upward mobility or higher wages. Additionally, a gender gap persists even in rural areas, with women experiencing a higher unemployment rate (8%) compared to men (3%).

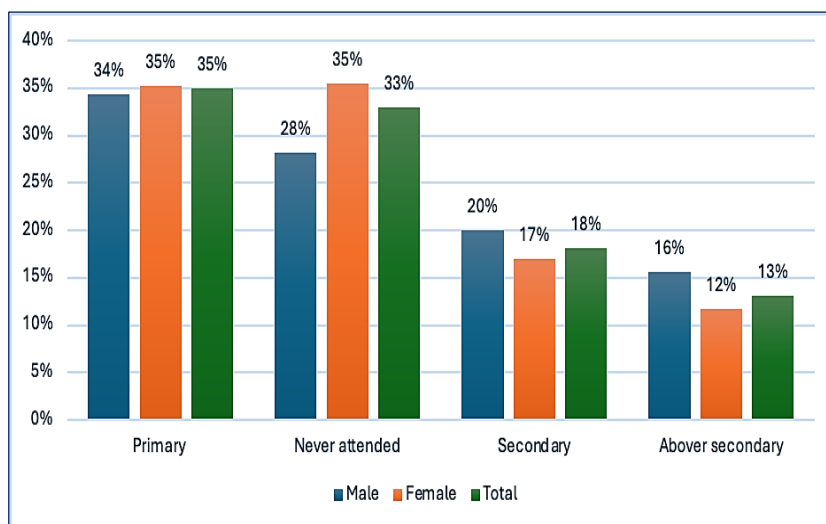
Table 8.3: Unemployment rate: urban vs rural

Gender	Employed (millions)	Unemployed (millions)	Total (millions)	Unemployment rate (%)
Total	41.64	3.61	45.25	8
Male	23.99	1.26	25.25	5
Female	17.65	2.35	19.99	12
<i>Urban</i>				
Total	8.10	1.77	9.87	18
Male	4.64	0.59	5.23	11
Female	3.46	1.18	4.64	25
<i>Rural</i>				
Total	33.53	1.84	35.38	5
Male	19.35	0.68	20.02	3
Female	14.19	1.17	15.36	8

Source: Computed from data in ESS (2021)

Figure 8.19 highlights the educational background of the unemployed workforce. As presented in the figure, the majority of them have completed primary education with little variation among males and females. A large number of them have also never attended any form of education though a significant number of unemployed labor force have secondary and above secondary education.

Figure 8.19: Educational attainment of unemployed labor force



Source: Computed from data in ESS (2021)

8.7. Wage Rate and Policy

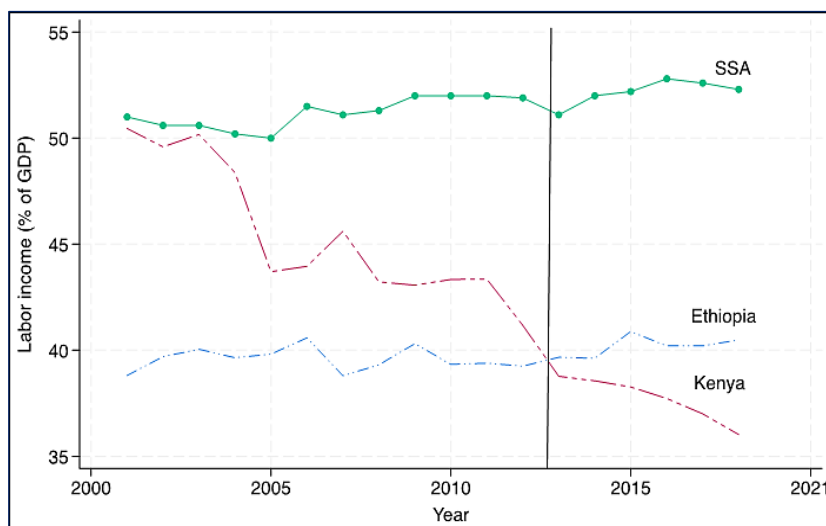
8.7.1. Wage rate

Labor income refers to the total earnings people receive for their work. It encompasses both the wages and salaries of employees and the profits of self-employed individuals. According to the International Labour Organization (ILO) (2024), labor income can also be viewed as a share of Gross Domestic Product (GDP). This perspective reveals the portion of a country's economic output that goes towards compensating

workers, contrasting it with the share allocated to capital owners (e.g., profits from investments).

While there have been fluctuations, the labor income share of GDP has stayed relatively close to 40% over the past decade. It reached a high of 41% in 2018 and a low of 39% in both 2011 and 2015, respectively. It's worth noting that this is lower than the Sub-Saharan Africa average of 52% in 2021. For instance, countries like Switzerland (70.5%), Netherlands (62.5%), Iceland (62%), Germany (61.4%), and Belgium (61.1%) all have a higher labor income share as a percentage of GDP. However, it is higher compared to some countries such as Kenya (36%), Sudan (37.5%) and Rwanda (38.1) (ILO, 2021).

Figure 8.20: Labor income as a percentage of GDP



Source: Computed from data in ILO (2004-2020)

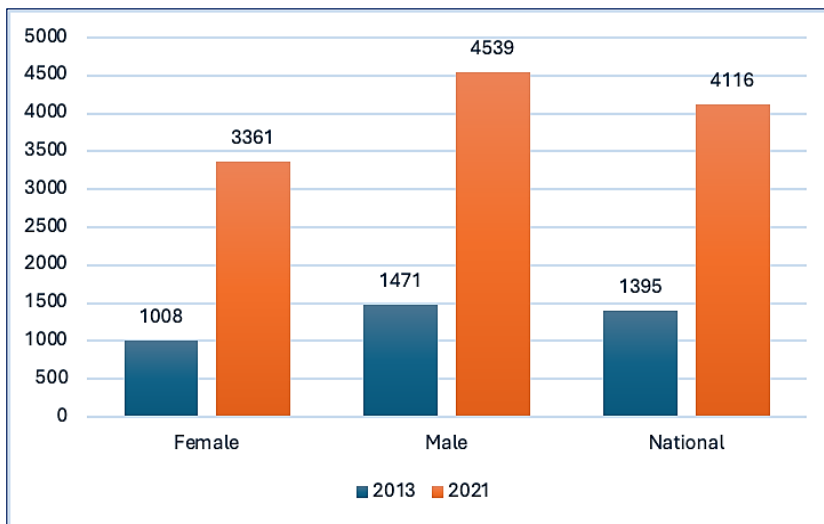
Employee compensation in Ethiopia has seen a substantial increase over the past eight years, between 2013 and 2021. The average monthly payment jumped from 1,305 Birr in 2013 to 4,116 Birr in 2021,

representing a growth of 215%. However, a closer look reveals a more complex reality. While nominal wages have increased, the cost of living has also risen significantly. The Consumer Price Index (CPI) grew by 172% during the same period. This means that the purchasing power of employees has not necessarily kept pace with the rise in Birr amounts. Calculating real wage growth (which factors in inflation) would provide a clearer picture of employee well-being.

On the other hand, it should be noted that the initial average of 1,305 Birr per month in 2013 is a very low baseline. This raises concerns about whether even the 2021 average is sufficient to meet basic needs for a family. This is revealed by comparing the monthly payments with living wage estimates which highlight the challenges. For instance, the living wage in towns outside Addis Ababa, like Ziway, reportedly increased from 3,367 Birr in 2017 to 10,607 Birr in 2022 (Andersen et al., 2022). This suggests that the national average falls short of ensuring basic needs are met across the country

The data also highlights a gender pay gap. In both 2013 and 2021, men reportedly received higher average monthly payments than women. Further analysis is needed to understand the extent of this gap and the factors contributing to it.

Ethiopia has seen a modest narrowing of its national gender wage gap. From 2013 to 2021, the gap decreased from 27% to 21%, representing a positive step towards equal pay. The decrease in the national average gap suggests some progress towards gender pay equity. This could be due to factors like increased female education and participation in the workforce.

Figure 8.21: Average monthly salary (2013-2021) in ETB

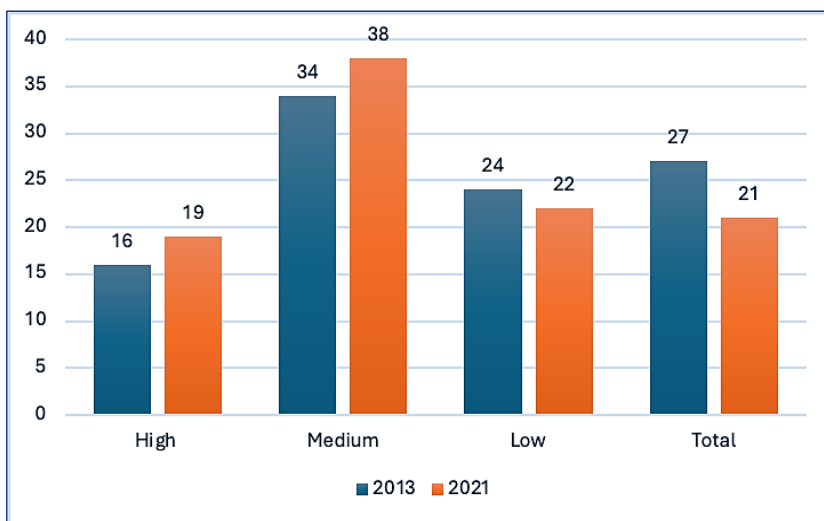
Source: Computed from data in ESS (2013, 2021)

However, while the overall gap narrowed, the situation in high-skill occupations worsened. The gap in these jobs actually increased from 16% to 19%, indicating that women in these professions are falling further behind their male counterparts. This could be due to several reasons, including unconscious bias in hiring and promotion practices, or a lack of female role models in high-skilled fields.

The only category showing a decline in the gender pay gap is low-skill jobs. Here, the gap narrowed from 24% to 22%. While this is positive, it's important to consider the generally lower wages associated with low-skill work. Even with a smaller gap, women in these jobs may still struggle to make ends meet.

To further uncover the factors driving these trends, we looked at the gender pay gap by specific occupation between 2013 and 2021. This could provide insights into the industries where women face the greatest challenges and inform targeted interventions to promote equal pay in Ethiopia.

Figure 8.22: Gender wage gap by skill level (%)



Source: Computed from data in ESS (2013, 2021)

8.7.2. Minimum wage policy

8.7.2.1. Benefits of minimum wage

A minimum wage sets a legal floor for how much employers can pay their workers. It acts as a safety net to prevent exploitation and ensure workers receive a basic level of compensation (Adema et al., 2019). Minimum wage can be seen as a government intervention in the labor market, serving a dual purpose. On the one hand, it can be a tool for economic policy, influencing broader trends. On the other hand, it functions as a social tool, directly aiming to improve the well-being of low-wage workers by setting a minimum income based on specific conditions within each country.

Minimum wage plays a multifaceted role. First, it guarantees baseline compensation (a) for the work a worker performs. This directly translates to a worker's basic income (b), providing them with

purchasing power to meet their needs. However, minimum wage also functions as a production cost (c) for businesses. The method of setting minimum wage varies, and can be established by law (statute), through negotiations between workers and employers (collective bargaining agreements), or by decisions from national boards or arbitration awards (Adema et al., 2019 and Del Carpio & Pabon, 2014).

There's a global inconsistency in how minimum wage is calculated. Many countries lack clear definitions of what elements contribute to that minimum amount. Even when definitions exist, significant variations remain. Key points of contention include as discussed in Adema et al., 2019 and Del Carpio & Pabon, 2014):

- **Comprehensiveness:** Does the minimum wage only account for the base salary, or does it include bonuses, tips, or allowances?
- **Cash vs. in-kind:** Is the focus solely on cash payments, or does it extend to the value of non-cash benefits provided by employers?
- **Overtime:** Does the minimum wage guarantee apply to regular pay only, or does it also encompass overtime earnings?

For instance, several countries, like Antigua and Barbuda, strictly consider only the base salary when calculating minimum wage. This lack of standardization makes it difficult to compare minimum wage structures across different nations (Kasa, 2021).

8.7.2.2. *Structure of minimum wage*

Governments introduce minimum wage aiming to protect workers with a living wage which could be done based on cost of living and other factors. At the same time, governments also want to attract foreign investment, often seen as an engine for economic growth. Minimum wage can be seen as a potential disincentive for investment, particularly in developing countries (Kasa, 2021).

Minimum wages are known to have a profound impact not only on the labor market but also the whole economy. In this regard, it is crucial that the minimum wage system should be managed in ways that maximize its benefits while minimizing its potential negative impacts.

Many countries of the world have a statutory minimum wage. However, those countries that do not have statutory minimum wages have either strong unions or sectoral minimum wages. A few developed nations with high GDPs and powerful worker unions rely on collective bargaining to set minimum wages for different industries (sectoral minimum wages) instead of a national minimum wage. Some developing economies, on the other hand, lack a national minimum wage altogether. In rare cases, they might have a minimum wage only for public sector employees, which can even be higher than the average national wage (US Department of Labor, 2017).

Minimum wage structures vary across countries. Some nations implement sectoral minimum wages, meaning the minimum pay level differs depending on the industry a worker is employed in. In contrast, other countries have a single, uniform minimum wage that applies across all sectors (Adema et al., 2018). Minimum wage variations can also extend to worker characteristics in some countries. This could include factors like age, experience, or disability. Age exemptions are particularly common, with younger workers receiving a proportional minimum wage based on their age. For instance, in 2018 Australia's minimum wage varied for young workers, with 16-year-olds receiving 47.3% and 20-year-olds receiving 97.7% of the full adult minimum wage (Adema et al., 2018).

8.7.2.3. Determination of minimum wage

Minimum wage is not a one-size-fits all policy. Governments across the world employ different methods to determine the appropriate level for

their citizens. Countries take different approaches to minimum wage, with some relying on government mandates and others on industry-specific negotiations or no minimum wage at all. This section delves into these diverse approaches, exploring how countries involve stakeholders, leverage expert analysis, and even utilize automatic adjustments to establish minimum wage.

While governments hold the ultimate authority to set minimum wages, the process often involves others. For instance, the Union member states in 2017 considered recommendations from various stakeholders or mechanisms before making a final decision. However, in some EU countries (Czech Republic, Poland, Portugal, Romania, Slovakia, and Slovenia), consultations didn't lead to agreement. In these cases, the government ultimately set the minimum wage unilaterally (Eurofound, 2019)

In some countries, tripartite bodies, composed of government representatives, worker unions, and employer organizations, play a crucial role in setting minimum wages. In 2017, most European Union member states consulted these bodies for recommendations on minimum wage levels, with some recommendations being non-binding (Eurofound, 2019). This committee ensures balanced representation with an equal number of members from each group, and decisions are made by majority vote (International Labor Organization, 2014). This approach highlights the potential for collaboration between government, workers, and businesses in establishing minimum wage levels.

Some countries, like Australia, Brazil, France, and Germany, rely on independent expert committees to advise the government on minimum wage levels. Australia's Minimum Wage Panel exemplifies this approach. This panel comprises individuals from diverse backgrounds, including economics, business, social justice, workplace relations,

academia, and community service. Each year, the panel conducts a comprehensive review, considering written submissions from interested parties, consultations with experts, and commissioned research. Based on this review, they determine a recommended minimum wage level. The government then incorporates this recommendation into minimum wage changes, implemented by either state or federal tribunals (Australian Government, 2018c).

Outside of tripartite or expert committee, Trade unions and employer organizations can also be instrumental in setting minimum wage levels. For instance, in 2017, Bulgaria, France, Hungary, Latvia, and the United Kingdom, directly negotiated the minimum wage without involving tripartite bodies or expert committees. However, this approach does not always guarantee agreement. In Hungary and Bulgaria during 2017, for instance, negotiations between unions and employers failed to reach a consensus on the minimum wage (Eurofound 2019). This highlights the potential for both collaboration and challenges when these stakeholder groups take the lead in setting minimum wage.

Several countries, including Belgium, Brazil (in some states), Canada (in some provinces), China, India, the Netherlands, Malta, and Turkey, utilize indexation mechanisms to automatically adjust minimum wage levels. China's system exemplifies this approach, considering various regional economic factors in its calculations. These factors include average living expenses, wages, social security contributions, unemployment rates, and the level of development within a region (Adema et al., 2018). Indexation mechanisms aim to streamline minimum wage adjustments by tying them to objective economic indicators, potentially reducing the need for frequent negotiations or government intervention.

In Kenya, a long-standing minimum wage policy has been in place since the country gained independence. This system involves a complex structure with seventeen different minimum wage orders. These orders establish varying minimum wage floors based on three key factors: the worker's occupation, the industry they work in, and their location. Updates to these minimum wages occur annually, ensuring salaried employees over 18 in the formal sector receive the adjusted rates. It's important to note that this policy does not cover the self-employed, and separate wage structures exist for agricultural workers and those in other activities.

8.7.3. Lessons for Ethiopia

Ethiopia's new labor proclamation, which came into effect on September 5, 2019, proposed the establishment of a minimum wage board for the first time. The proposed board is expected to comprise representatives of the government, employers, and trade unions together with other stakeholders. It will periodically revise minimum wages based on studies which take into account the country's economic development, labor market and other considerations. However, the wages board is not yet operational.

A minimum wage is more critical than ever in Ethiopia due to the rising cost of living. Workers, especially low-income earners, are struggling to afford basic necessities like food. This impacts their productivity and overall well-being. With a legal framework already in place (Labor Proclamation 1156/2019), implementing a minimum wage is both timely and just.

Setting an effective minimum wage requires careful consideration of various factors, supported by empirical studies. These factors include:

- **Cost of living:** This is a primary consideration, as the minimum wage should enable workers to afford basic necessities in their region.
- **Economic growth rate:** A healthy economy allows for more sustainable minimum wage increases.
- **Labor productivity:** Ideally, minimum wage increases should reflect rising worker productivity.
- **Labor demand and supply:** A balanced labor market is crucial to avoid unintended consequences like job losses due to excessively high minimum wages.
- **Sector and geographic factors:** Minimum wages may need to vary by industry and region to account for differences in living costs and economic activity.

Governments typically adjust minimum wages based on these factors: Changes in economic growth, inflation (measured by the Consumer Price Index), and labor market conditions can trigger adjustments. For instance, Vietnam serves as a good example of a country that implements a tiered minimum wage system. The government, in consultation with workers and employer representatives, set general minimum wages, regional minimum wages, and minimum wages for specific sectors in 1993. These wages are periodically reviewed and adjusted to ensure they keep pace with rising living costs and maintain the ability of workers and their families to meet their basic needs. Since its introduction in 1993, Vietnam's minimum wage policy has been adapted over time to reflect economic development and improve the quality of life for workers (Kasa, 2021).

The experiences of other countries highlight the importance of a data-driven approach to setting and adjusting minimum wages.

1. Multifaceted considerations. Minimum wage should not be a one-size-fits-all solution. For instance, Vietnam successfully implemented tiered systems that consider factors like cost of living (ensuring workers can afford basic needs in their region), economic growth (allowing for sustainable wage increases), and labor productivity (linking wage growth to worker output).
2. Regular adjustments. Minimum wage needs to keep pace with changing economic realities. Cost of living adjustments (COLA), based on inflation (measured by the Consumer Price Index), are crucial to maintaining the purchasing power of the minimum wage. Additionally, economic growth can justify further minimum wage increases.

Thus, Ethiopia, before implementing a minimum wage policy, should conduct a thorough study that examines the minimum wage issue across various demographics and sectors. This study should document realities in different geographic locations, considering the varying costs of living across regions. It should also explore the needs of different sectors (e.g., agriculture vs. manufacturing), age groups (young workers vs. experienced workers), and occupations (skilled vs. unskilled labor).

8.8. Concluding Remarks

This chapter delved into the complexities of Ethiopia's labor market, drawing on data from the International Labor Organization (ILO) and the Ethiopian Statistical Services (ESS). Additionally, relevant policy documents, government pronouncements, and studies were reviewed.

One key takeaway is the need to update Ethiopia's National Population Policy. Introduced in 1993, it no longer reflects the current social and economic situation. A revised policy that addresses challenges like establishing a population council and integrating population factors into development plans is crucial.

Ethiopia's growing working-age population presents a demographic dividend opportunity. However, unlocking this potential requires tackling youth labor participation. The gap between the rising number of young workers and their actual workforce involvement highlights the need for better equipping them with skills and fostering stronger links between education and employment.

Gender disparity in the labor force participation is another hurdle. Societal norms, childcare responsibilities, and unequal access to resources disproportionately affect women's opportunities. Promoting female education, fostering employment opportunities, and shifting social norms are essential to bridge this gap.

Ethiopia's labor market has a high dependency ratio, meaning a large number of dependents rely on a smaller working-age population. To address this, increasing labor force participation, particularly among young people, is critical. While education and skills development are crucial, policies promoting gender equality and addressing the urban-rural divide in employment opportunities are equally important.

The informal sector, particularly dominant in rural areas, plays a significant role in job creation. However, the prevalence of self-employment and unpaid work underscores the need for strategies to promote formalization and create more salaried jobs. Supporting micro-businesses, improving access to resources for women entrepreneurs, and encouraging investment in rural development can contribute to a more balanced and inclusive labor market.

Beyond the dominance of agriculture, which employs a staggering 65% of the workforce, there are signs of a growing professional and technical workforce. However, a significant portion of the workforce remains in elementary occupations and lacks formal education. This underscores

the need for investment in education and skills training to diversify the labor market and bridge the skills gap.

The study also reveals gender disparities in employment sectors and education levels. Addressing this gap is crucial to ensure equal opportunities and unlock the full potential of Ethiopia's workforce. Overall, Ethiopia's labor market is at a crossroads. Fostering a more diversified and skilled workforce will be essential for sustainable growth and development, while agriculture remains the backbone of the economy.

Youth unemployment presents a significant challenge, with young adults (15-24) facing rates as high as 10%. This could be due to a skills gap between education and job requirements. Investment in targeted education and skills training programs for young people is crucial to improve their employability. In contrast, the picture is brighter for experienced workers, with unemployment rates dropping steadily with age. This suggests that experience is valued in the Ethiopian labor market. Additionally, adult unemployment in Ethiopia compares favorably to neighboring countries.

However, gender and location disparities paint a more complex picture. Women face a much higher unemployment rate (12%) compared to men (5%) nationally. This gap widens further in urban areas, where women struggle with a staggering 25% unemployment rate. Addressing these disparities through targeted policies that promote female entrepreneurship and encourage equal opportunities in the job market is essential. While rural areas have a lower overall unemployment rate, limited upward mobility in agriculture and a persistent gender gap remain concerns. A multi-pronged approach that tackles youth unemployment, promotes gender equality in the workplace, and fosters growth beyond agriculture is necessary to create a more inclusive and prosperous labor market in Ethiopia.

Ethiopia has seen a nominal increase in wages over the past eight years. However, rising inflation has eroded much of these gains. The real picture of employee well-being remains unclear. Additionally, the national average wage might not be sufficient to meet basic needs, especially considering regional variations in living costs.

A concerning gender pay gap persists, with women receiving lower average wages than men. This gap even widens in urban areas and high-skill occupations. Policies promoting equal pay and female entrepreneurship are crucial to address this disparity.

The minimum wage, a potential safety net for low-income earners, is yet to be implemented in Ethiopia. Establishing an effective minimum wage requires careful consideration of various factors, including the cost of living, economic growth, and labor market conditions. Learning from other countries that utilize tiered systems and regular adjustments based on economic data can be beneficial for Ethiopia. A comprehensive study examining minimum wage needs across demographics, sectors, and regions is necessary before policy implementation.

References

- Adema, J., Giesing, Y., Schönauer, A., & Stitteneder, T. (2019). Minimum wages across countries. Ifo DICE Report, 16(4), 55-63.
- Andersen, L. E., Medinaceli, A., Gonzales, A., Anker, R., & Anker, M. (2022). Living Wage Update Report: Non-metropolitan urban Ethiopia, Ziway, 2022 (No. 22-04-25). Universidad Privada Boliviana.
- Australian Government. (2018c). Fair Work Commission: Australia's national workplace relations tribunal, accessed online from, <https://www.fwc.gov.au/>, on 5 June 2024).
- Bourmpoula, V., Kapsos, S. and Pasteels, J. M.. (2013). ILO estimates and projections of the economically active population: 1990-2030, Geneva.
- Del Carpio, X., & Pabon, L. (2014). Minimum wage policy: Lessons with a focus on the ASEAN region.
- Ethiopian Statistical Services (ESS). (2013). National Labor Force Survey _____ . (2021). National Labor Force and Migration Survey Eurofound (2018), Statutory minimum wages 2018, Publications Office of the European Union, Luxembourg.
- Eurofound. (2019). Annual review of working life 2018, Publications Office of the European Union, Luxembourg.
- FDRE. (2019). Federal Negarit Gazette of the Federal Democratic Republic of Ethiopia. Proclamation No.1156/2019, 25th Year No. 89 Addis Ababa 5th September, 2019
- Federal Democratic Republic of Ethiopia (FDRE). (1993). National Population Policy
- Goldin, C. (1995). The U-shaped female labor force function in economic development and economic history
- Hailemariam, Assefa, Alayu, S. and Teller C. (2011). The 1993 National Population Policy of Ethiopia: Achievements, Challenges and Lessons Learned. In: Teller C. and Assefa Hailemariam. The Demographic Transition and Development in Africa: The Unique Case of Ethiopia. Springer.

- International Labor Organization. (ILO). (2024). Statistical Brief: The impact of care responsibilities on women's labour force participation. ILO brief _____, (2021). ILOSTAT, accessed online from ILOSTAT Data Explorer on May 18, 2024.
- _____. (2014). Minimum wage systems, International Labour Office, Geneva.
- _____. (2019). Global Labour Income Share and Distribution. Methodological description
- _____. (2013). International standard classification of occupations, ISCO-08
- Kasa, E. (2021). The Minimum Wage System in Ethiopia: Comparative Analysis with other Nations, Abyssinia Law.
- Mekonnen Yimer, B., Herut, A. H., Demissie, M. M., Bareke, M. L., Agezew, B. H., Dedho, N. H., & Lebeta, M. F. (2024). Trends of higher education enrolment, graduation, and employment in Ethiopia: an empirical analysis. *Cogent Education*, 11(1), 2302623.
- Minas, G. (2008). A Review of the National Population Policy of Ethiopia. In: Taye Assefa (ed.). *Digest of Ethiopia's National Policies, Strategies and Programs*. Addis Ababa, Forum for Social Studies, PP. 23-46.
- Sangwan, N., & Kumar, S. (2021). Labor force participation of rural women and the household's nutrition: Panel data evidence from SAT India. *Food Policy*, 102, 102117.
- Uberti, L. J., Douarin, E. The Feminisation U, cultural norms, and the plough. *J Popul Econ* 36, 5–35 (2023). <https://doi.org/10.1007/s00148-022-00890-5>
- UN Economic and Social Commission for Asia and Pacific (ESCAP). (2022). Female Labour Force Participation and the Care Economy in Asia and the Pacific. Policy paper.
- United States Department of Labor. (2018). Wage and Hour Division (WHD), accessed online on June 2, 2024 from <https://www.dol.gov/whd/minwage/q-a.htm#full>

9. POVERTY AND INEQUALITY

9.1. Introduction

Economic development and social welfare can be measured using several indicators including real GDP, GDP per capita income, and human development index (HDI). However, there are other aspects of human welfare that cannot be captured by these aggregate indicators. GDP, as a measure of human welfare, has several limitations.

GDP measures the value of goods and services produced for final consumption. It is a measure of output (not welfare) that ignores income distribution or inequality. Welfare conditions related to inequality and redistribution cannot be measured by GDP and GDP per capita. Above a certain level, a higher material standard of living does not make people happier. Furthermore, GDP does not directly take account of nonmaterial needs.

On the other hand, the HDI is a broader measure of key dimensions of human development captured by a long and healthy life, a good education, and a decent standard of living. Unlike GDP per capita, the HDI considers social development (health and education) and standard of living to capture the level of social progress. The HDI provides a broader picture of an economy than GDP per capita does. The HDI measures the social (or qualitative aspects) and economic progress of nations. Though human welfare is adversely affected by income distribution, HDI is an aggregate measure that does not take income inequality into account.

Poverty and inequality are measures of standard of living or welfare both at a macro and micro or household level. Distributive analysis is employed to measure other welfare issues that cannot be captured by GDP per capita and HDI. This analysis includes nonmaterial elements

that affect people's well-being at household level. Poverty and inequality indices estimated from household surveys are more realistic, reflecting the actual standard of living experienced by citizens. These indices provide insights into the disparities in income distribution and access to resources within a population, highlighting areas where interventions are most needed to improve welfare outcomes. In this study country-representative household survey data was employed to measure welfare situations at the household level.

For its several advantages, the Foster-Greer-Thorbecke (FGT) measures of poverty and inequality is employed to investigate the welfare conditions of households between 2018/19 and 2021/22. Real consumption expenditure was used as an indicator of economic wellbeing. It is used to analyze the incidence, depth, and severity of poverty. Pro-poor growth policies pursued in Ethiopia were also assessed at regional and national levels.

The study is generally aimed at examining poverty, inequality, and pro-poor growth policies pursued in Ethiopia. It is specifically intended to:

- a. Measure the dynamics of poverty and inequality;
- b. Estimate the poverty effects of growth and redistribution; and
- c. Identify pro-poor growth policies pursued in Ethiopia.

9.2. Methodology

9.2.1. Datasets

To account the major limitations of GDP and HDI as measures of human welfare, this study estimates the economic welfare of households using two country-representative surveys of the Living Standards Measurement Study (LSMS), covering 6,191 and 4,959

households surveyed nation-wide²⁸ in 2018/19 (wave 4) and 2021/22 (wave 5) respectively (Table 9.1).

Table 9.1: Distribution of LSMS samples across waves and regions

Regions	Wave 4 (208/2019)	Wave 5 (2021/2022)
Dire Dawa	676	521
Oromia	753	637
Addis Ababa	778	644
Somali	610	522
SNNP	691	657
Benishangul-Gumuz	364	206
Harari	550	444
Amhara	750	656
Gambella	495	422
Afar	524	250
National	6,191	4,959

Source: Compiled from LSMS data in the World Bank (wave 4 and Wave 5).

In this study, nominal household consumption expenditure is adjusted to account for inflation using constant basic prices in 2016. This adjustment ensures that the data reflects real changes in consumption, excluding the effects of price changes over time. The Consumer Price Index (CPI) is a key tool in this process, as it helps remove the impact of inflation on consumer prices or final household consumption expenditure. However, Ethiopia's regional states have experienced significant variations in consumer price inflation, leading to disparities in the cost of living across different areas. These regional differences mean that a single national CPI would not accurately reflect the

²⁸ Due to the domestic conflict erupted in 2020 in Northern Ethiopia, Tigray regional state was not covered by the 2021/22 survey. Consequently, the region is not covered by this study.

inflationary pressures faced by households in various regions. Using the national CPI for adjustment could result in misleading conclusions about real consumption expenditures and welfare conditions at the regional level.

To address this issue, the study employs regional CPIs to deflate the consumer prices specific to each region or city administration. This approach allows for a more accurate and nuanced analysis of real household consumption expenditure, considering the unique inflationary trends in each area. By using region-specific CPIs, the study ensures that the adjustments for inflation are relevant and precise, providing a clearer picture of the actual standard of living and economic well-being experienced by households across different regions of Ethiopia (Table 9.2).

Table 9.2: Adjustment of consumption expenditure for inflation

Region	Deflator (general inflation, December 2016=100)	
	2018/19	2021/22
Tigray	136.48	213.78
Harari	121.43	251.55
Gambella	123.17	244.01
Benishangul Gumuz	133.49	288.35
Somali	124.08	231.55
Afar	124.43	235.40
Amhara	138.89	255.19
Oromia	129.87	255.00
SNNP	129.52	277.51
Dire Dawa	125.02	240.87
Addis Ababa	119.52	252.46
National	132.04	254.66

Source: Compiled from LSMS data in the World Bank

9.2.2. Determination of the poverty line

National poverty lines are the benchmark for estimating poverty indicators that are consistent with the country's specific economic and social circumstances. Like poverty lines estimated in developing countries, the poverty line for Ethiopia is anchored to the cost of a food bundle, based on the prevailing national diet of the poor, that provides adequate nutrition for good health and normal activity, plus an allowance for nonfood spending. National poverty lines must be adjusted for inflation between survey years to allow for meaningful comparisons of poverty over time.

Poverty lines are expected to change for a population mainly because of two factors, the price changes and the determination of the poverty line. Poverty lines reflect the costs of purchasing food and non-food items in which nominal poverty lines increase as prices change. In addition, the way the poverty line is constructed may change. Without further information, the rise in the poverty line cannot tell whether the rises in the poverty line merely reflect changes in prices or represent a revision in the real poverty threshold.

In the longrun, the consumption pattern, or food bundle of households is expected to change. If the consumption bundle is not significantly changed, real poverty lines do not change. The national poverty lines estimated for Ethiopia in 2016 was ETB 7,184 for total absolute poverty and ETB 3,781 for food poverty. These specific poverty lines measure the minimum acceptable standard of living in Ethiopia, which cannot be compared with other countries.

The share of food expenditure in 2015/16 was 55%. Due to the inflationary trend prevailing in Ethiopia, the food expenditure share in the last two waves was significantly increased (above 75%). If the food bundle consumed by households did not significantly vary in real terms

since 2015/16, the national poverty line estimated by the Ethiopian government in 2015/16 can be employed to measure the dynamics of welfare situation in Ethiopia.

9.2.3. *Estimation of poverty and inequality*

The Foster-Greer-Thorbecke (FGT) poverty measures are additively decomposable which can separate changes in the FGT measures into a component resulting from rising average incomes/expenditures, and a component resulting from changes in the distribution of income/expenditure. For several advantages, the FGT measure of poverty and inequality was employed to measure the welfare conditions of households in 2018/19 and 2021/22 and the welfare dynamics between the two periods.

In this study, real consumption expenditure was used as an indicator of economic wellbeing. It was used to analyze the incidence, depth, and severity of consumption poverty. As one of the measures proposed by Foster et al. (1984), it may generally be written as

$$P_a = \frac{1}{N} \sum_{i=1}^N \left(\frac{G_i}{z} \right)^a, a \geq 0 \quad (1)$$

where α is a measure of the sensitivity of the index to poverty and the poverty line. When parameter $\alpha = 0$, P_0 is simply the headcount index. When $\alpha = 1$, the index is the poverty gap P_1 , and when α is set equal to 2, P_2 is the poverty severity index. For all $\alpha > 0$, the measure is strictly decreasing in the living standard of the poor.

The FGT poverty index (P) can be decomposed i to population subgroups as follows (Araar and Duclos, 2013):

$$\hat{P}(z, \alpha) = \sum_{g=1}^G \hat{\phi}(g) \hat{P}(z; a_g) \quad (2)$$

where G is the number of population subgroups, $\hat{P}(z, \alpha, g)$ is the estimated FGT index of subgroup g , $\hat{\phi}(g)$ is the estimated population share of subgroup g , $\sum_{g=1}^G \hat{\phi}(g) \hat{P}(z; a, g)$ is the estimated absolute contribution of subgroup g to total poverty, and $\sum_{g=1}^G \hat{\phi}(g) \hat{P}(z; a, g)$ is the estimated relative contribution of subgroup g to total poverty.

The total alleviation of FGT poverty into a sum of the contributions generated by separate income/expenditure components can also be decomposed. Total alleviation is maximal when all individuals have an income/expenditure greater than or equal to the poverty line. A negative sign on a decomposition term indicates that an income component reduces poverty.

Assume that there exist K income/expenditure sources and that s_k denotes source k . The FGT index is defined as (Araar and Duclos, 2013):

$$\hat{P} = (z; a, y = \sum_{i=1}^n s_k) = \frac{\sum_{i=1}^n (1 - y/z)^a}{\sum_{i=1}^n w_i} \quad (3)$$

where w_i is the weight assigned to individual i and n is the sample size. This estimates the share in total consumption expenditure of each source k and the absolute and relative contributions of each source k to the value of $\left(\hat{P}_{-1} \right)$.

Growth elasticity of poverty (GEP) is the percentage reduction in poverty rates associated with a percentage change in mean income or

expenditure. The information on the responsiveness or sensitivity of poverty measures to changes in income or expenditure is relevant to evaluating the impacts of poverty reduction measures. The overall GEP, when growth comes exclusively from growth within a group k (within that group, inequality neutral), is estimated by (Araar & Duclos, 2007; Araar, 2012):

$$GEP = \begin{cases} -\frac{zf(k,z)}{F(z)} & \text{if } \alpha = 0 \\ \alpha \frac{\bar{P}(k,z;\alpha) - \bar{P}(k,\bar{z};\bar{z}\alpha-1)}{\bar{P}(z,\alpha)} & \text{if } \alpha \geq 1 \end{cases} \quad (4)$$

where z is the poverty line, k is the population subgroup in which growth takes place, $f(k, z)$ is the density function at level of income or expenditure z of group k , and $F(z)$ is the headcount.

The property of mean independence is considered a desirable feature of inequality measures. Inequality measures are often calculated for their distributions. Other than expenditure, most inequality measures, income, land, assets, tax payments, and other continuous and cardinal variables, do not depend on the mean of the distribution. As a good measure of income and consumption inequality, the Gini coefficient has the desirable properties (Haughton & Khandker, 2009).

The Gini coefficient is the most widely used single measure of inequality officially used by the World Bank to compare inequality among countries. It is based on the Lorenz curve, a cumulative frequency curve that compares the distribution of a specific variable with the uniform distribution that represents perfect equality. To construct the Gini coefficient, we create a graph of the cumulative percentage of households (e.g. from poor to rich) on the horizontal axis and the cumulative percentage of expenditure (e.g. income) on the vertical axis.

The diagonal line in the Lorenz curve represents perfect equality. The Gini coefficient is defined as

$$G = \frac{A}{A+B} \quad (4a)$$

$$= 1 - \sum_{i=1}^N (x_i - x_{i-1})(\gamma_i + \gamma_{i-1}) \quad (4b)$$

where A and B are the areas in the Lorenz curve²⁹, x_i is a point on the x-axis, and γ_i is a point on the y-axis.

When there are N equal intervals on the x-axis, the equation simplifies to the following

$$G = 1 - \frac{1}{N} \sum_{i=1}^N (\gamma_i + \gamma_{i-1}). \quad (5)$$

9.2.4. *Measuring pro-poor growth*

Growth policies can be either pro-poor or anti-poor (not pro-poor). Pro-poor growth is the growth in income that benefits the poor. However, how much poverty reduction is required for growth to be considered pro-poor? The degree of being pro-poor is measured by a pro-poor growth index (PPGI). This index shows the relationship between total poverty reduction and poverty reduction that results from a distribution-neutral growth (Ravallion & Chen, 2003). Poverty reduction depends on two factors: growth and how the benefits of growth are distributed among the poor and the nonpoor. The pro-poor growth index (PPGI) is the ratio of the total poverty elasticity to the growth elasticity of poverty. Growth is pro-poor (antipoor) if the change in inequality that accompanies it reduces (increases) total poverty (Kakwani, et al. 2004). A measure of pro-poor growth is absolute if after comparing the

²⁹ If A = 0, the Gini coefficient becomes 0, which means perfect equality; if B = 0, the Gini coefficient becomes 1, which means complete inequality.

absolute benefits from growth, the poor gain more than the nonpoor. This is called poverty equivalent growth rate (PEGR).

The following decision rules hold true for most estimates of pro-poor growth indices:

- If PPGI is greater than unity, growth is pro-poor (the inequality effect is less than 0), the poor benefit proportionally more than the non-poor, growth results in a redistribution in favor of the poor.
- If PPGI equals unity, everyone receives the same proportional benefits.
- If PPGI is less than zero, economic growth leads to an increase in poverty, may be characterized as ‘immiserizing’ growth.
- If PPGI is between 0 and 1, growth is not strictly pro-poor (i.e., growth results in a redistribution against the poor) even though it still reduces the incidence of poverty. This situation may be generally characterized as ‘trickle-down’ growth.
- If the PEGR is greater (less) than the benchmark (actual growth rate of mean per capita income), growth is pro-poor (not-pro-poor).
- If PEGR lies between 0 and actual growth rate, the growth is accompanied by increasing inequality but still reduces poverty. This situation may be characterized as trickle-down process when the poor receive proportionally less benefits than the non-poor. However, when PEGR is negative, growth may increase poverty. The difference between the PEGR and the benchmark growth rate captures gains or losses of the growth rate due to changes in the distribution of income. The gains imply pro-poor growth, while the losses imply a growth policy that is not pro-poor.

Measures of pro-poor growth may take the following five different scenarios (Kakwani & Son, 2008):

1. **Relative pro-poor:** A measure of pro-poor growth is relative when economic growth benefits the poor proportionally more than the non-poor. While growth reduces poverty, it also improves relative inequality.
2. **Absolute/Super pro-poor:** A measure of pro-poor growth is absolute if the poor receive the absolute benefits of growth equal to, or more than, the absolute benefits received by the non-poor. In this approach, absolute inequality would fall during economic growth, which may also be referred to as ‘super pro-poor’.
3. **Strongly pro-poor:** When growth is negative, poverty in general increases. However, if the effect of inequality reduction on poverty outweighs the adverse impact of negative growth on poverty, there may be a situation in which a negative growth results in poverty reduction. This negative growth scenario may be termed as ‘strongly pro-poor’.
4. **Anti (not pro)-poor:** When negative growth raises poverty, growth is termed as ‘anti-poor’ or not ‘pro-poor’ even if inequality improves.
5. **Strongly anti (not pro)-poor:** If both poverty and inequality become worse during the spells of negative growth, growth is termed as ‘strongly anti-poor’.

One way of defining pro-poor growth is growth where poverty declines, irrespective of growth and distribution. In this case, growth will always be pro-poor whenever poverty falls (Ravallion & Chen, 2003). The Ravallion and Chen pro-poor index (2003) is estimated as

$$Index = \frac{W_1(z) - W_2(z)}{F_1} \quad (6)$$

where $W_D(z)$ is the Watts index for distribution $D \in [1, 2]$ and $F_1(z)$ is the headcount index for the first distribution, both with poverty lines z .

However, the strict definition of pro-poor growth emphasizes how the benefits of growth are distributed among the poor and the nonpoor in society. This definition focuses on growth that leads to poverty reduction whereby the benefits of growth accrue largely to the poor (McCulloch & Baulch, 2000; Kakwani & Pernia, 2000).

The full definition of pro-poor growth provides a conclusive result as to whether or not growth is pro-poor. The Kakwani and Pernia pro-poor index (2000) is estimated as follows:

$$Index = \frac{P_1(z, \alpha) - P_2(z\alpha)}{P_1(z, \alpha) - P_1(z(\mu_1/\mu_2), \alpha)} \quad (7)$$

The Kakwani, Khandker and Son pro-poor index (2003) is measured as

$$Index1 = g \frac{P_1(z, \alpha) - P_2(z\alpha)}{P_1(z, \alpha) - P_1(z(\mu_1/\mu_2), \alpha)} \quad (8)$$

where g is the growth rate, and the average growth (ag) is

$$ag = g(\mu_2 - \mu_1)/\mu_1 \quad (9)$$

and where a second index is given by:

$$Index2 = Index_1 - g \quad (10)$$

9.3. Poverty Profiles

The welfare indicators in the two panel surveys show significant dynamics (Table 9.3). Household size measured by both counts of family members and adult equivalent have shown rise between the two periods. The national household size in Ethiopia has increased. Real consumption expenditure per adult equivalent decreased for all kinds of expenditure items, strongly verifying the significant welfare loss households have experienced between the two periods. The results generally show that poverty has increased in Ethiopia between 2018/19 and 2021/22.

Table 9.3: Real consumption expenditure between the two waves

Variables	Mean index values		
	2018/19	2021/22	Changes
	(wave4)	(wave5)	(wave5-wave4)
Household size	4.65	4.91	0.26
Adult equivalent	3.77	4.06	0.29
Total annual real consumption expenditure per adult equivalent (ETB)	12,486	11,860	-626
Annual real consumption expenditure per adult equivalent on food (ETB)	9,042	8,472	-570
Annual real consumption expenditure per adult equivalent on nonfood (ETB)	1,562	1,441	-121
Annual real consumption expenditure per adult equivalent on other items (ETB)	1,271	1,082	-189

Note: Real consumption expenditure on nonfood and other items are not spatially adjusted.

Source: Computed from LSMS data in the World Bank

The welfare condition, measured by real consumption expenditure per adult equivalent, across regional states shows substantial difference (Table 9.4). Welfare gains were high between the two periods in Somali, Amhara, Gambella, and Afar. Welfare losses were high in Addis Ababa, Dire Dawa, Harari, SNNP, Oromia, and Benishangul-Gumuz. Welfare in Ethiopia deteriorated between the two periods.

Table 9.4: Annual real consumption expenditure across regions

Region	Real annual consumption expenditure per adult equivalent (ETB)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Somali	11,023	13,112	2,089
Amhara	10,326	11,959	1,633
Gambella	17,286	17,834	548
Afar	14,691	14,864	173
Benishangul Gumuz	14,598	13,373	-1,225
Oromia	13,385	12,095	-1,290
SNNP	12,239	10,062	-2,177
Harari	21,737	18,602	-3,135
Dire Dawa	21,601	13,454	-8,147
Addis Ababa	24,760	15,827	-8,933
National	12,486	11,860	-626

Source: Computed from LSMS data in the World Bank

The long-term development of living standards at household level is often measured by Allen's welfare ratio. It is the ratio of annual real consumption expenditure per adult equivalent and the poverty line. The welfare ratio shows, on average, how far households are from the poverty line. The dynamics of the welfare ratio shows significant differences across regional states (Table 9.5). The results are consistent with the above welfare situation measured by real consumption expenditure changes across regions.

Table 9.5: Household welfare ratio across regions

Regions	2018/19 (wave5)	2021/22 (wave5)	Changes (wave5-wave4)
Somali	1.53	1.83	0.3
Amhara	1.44	1.66	0.22
Gambella	2.41	2.48	0.07
Afar	2.04	2.07	0.03
Benishangul Gumuz	2.03	1.86	-0.17
Oromia	1.86	1.68	-0.18
SNNP	1.70	1.40	-0.3
Harari	3.03	2.59	-0.44
Dire Dawa	3.01	1.87	-1.14
Addis Ababa	3.45	2.20	-1.25
National	1.74	1.65	-0.09

Source: Computed from LSMS data in the World Bank

There have not been significant changes in the share of household consumption expenditure patterns between the two periods (Table 9.6). Food consumption expenditure covers the lion's share (over 77-78%) in the two periods. On the other hand, nonfood consumption expenditure covers less than 14% percent with negligible changes between the two periods. Similarly, consumption expenditure on other items was very small with negligible changes between the two periods.

Table 9.6: Shares of household consumption expenditure

Consumption expenditure items	Share (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Food	78.3	77.2	-1.1
Nonfood	13.2	13.6	0.4
Education	1.4	1.4	0
Food apart from house	5.3	5.9	0.6
Utilities	1.8	1.9	0.1

Source: Computed from LSMS data in the World Bank

Welfare changes between the two periods were also investigated by household expenditure quintiles (Table 9.7). Households in the lowest three quintiles, considered relatively poor, have shown improvements in their real consumption expenditure. The highest two quintiles, on the other hand, have experienced substantial welfare losses between the two periods.

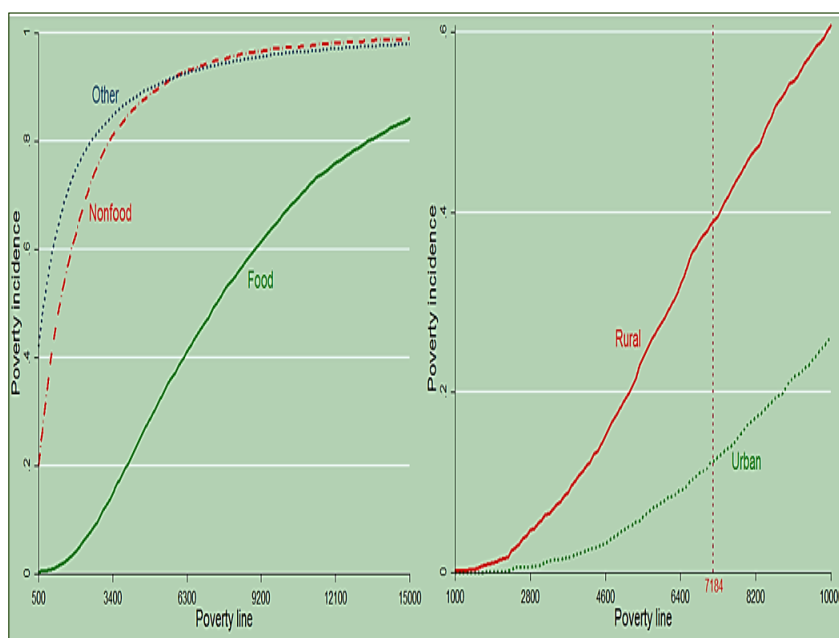
Table 9.7: Real consumption expenditure per adult equivalent by quintiles

Expenditure Quintiles	Real annual consumption expenditure per adult equivalent (ETB)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
1	3,835	4,377	542
2	6,837	7,465	628
3	10,070	10,192	122
4	14,961	14,236	-725
5	31,228	27,538	-3,690
National	12,486	11,860	-626

Source: Computed from LSMS data in the World Bank

The poverty incidence curves for 2021/22 shows several welfare implications in Ethiopia (Figure 9.1). Food was the primary expenditure item among Ethiopian households (left panel of the figure). The incidence of poverty was higher for nonfood consumption expenditure items, indicating that poverty in Ethiopia is largely determined by food expenditure. The poverty incidence gap between rural and urban households widened with income level (right panel of the figure). Compared to their urban counterparts, the incidence of poverty is relatively higher among rural households.

Figure 9.1: Poverty incidence curves by consumption expenditure and place of residence (2021/22)



Source: Computed from LSMS data in the World Bank

9.4. Poverty Incidence

The headcount poverty rate estimated at the national poverty line (ETB 7184) for the two periods significantly varies across regional states (Table 9.8). As indicated by the poverty profiles above, absolute poverty in Ethiopia decreased from 30.9% in 2018/19 to 26.1 % in 2021/22. Nationally, poverty was reduced by 4.8 % between the two periods. Around 4.7 million people have escaped from absolute poverty nationwide. Incidence of absolute poverty between the two periods increased more in Addis Ababa (4.8%), followed by Dire Dawa (4.2%), and Oromia (3.9%). New population descended to absolute was 1.52 million in Oromia and 0.18 million in Addis.

Poverty was reduced in all the other regions. Poverty reduction between 2018/19 and 2021/22 was relatively more in Amhara (21.1%), Gambella (16%0, Benishangul-Gumuz (13.9%), and Afar (9.7%). About 4.75 million in Oromia, 0.93 million in SNNP, and 0.44 million population in Somali escaped absolute poverty. The poverty reduction in Harari (1.1%) and SNNP (4.5%) regions was negligible or relatively small. However, compared to the 23.5% poverty rate in 2015/16, absolute poverty in 2021/22 rather increased by 2.6%) (FDRE, 2018). An additional 2.6 million poor population descended to absolute poverty between the two periods. In 2021/22 25.2 million of the Ethiopian population was absolutely poor.

Table 9.8: Total absolute poverty rates across regions

Regions	Absolute poverty rate (%)			Population in absolute poverty in 2021/22 (million)
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)	
Addis Ababa	5.4	10.2	4.8	0.38
Dire Dawa	17.5	21.7	4.2	0.11
Oromia	27.3	31.2	3.9	12.19
Harari	11.2	10.1	-1.1	0.03
SNNP	46.4	41.9	-4.5	8.67
Somali	41.7	34.8	-6.9	2.21
Afar	32.6	22.9	-9.7	0.46
Benishangul Gumuz	33	19.1	-13.9	0.23
Gambella	37.4	21.4	-16	0.11
Amhara	49.3	28.2	-21.1	6.35
National	30.9	26.1	-4.8	25.24

Note: The Ethiopia population (including Tigray) was estimated at 102.5 million in 2022 (OCHA, 2023). The regional population was also estimated by OCHA.

Source: Computed from LSMS data in the World Bank

The food poverty reduction is consistent with the total absolute poverty dynamics discussed above (Table 9.9). The highest food poverty reduction was achieved in Benishangul-Gumuz (14%), Gambella (11.9%), Afar (10.9%), Somali (9.3%), Amhara (8.7%), and SNNP (6.9%). Food poverty reduction was little in Harari and Dire Dawa (1.4%). The national food poverty rate was also reduced from 18.3 %

in 2018/19 to 14.4 percent in 2021/22. However, food poverty was rather significantly increased in Oromia by 6.2% and Addis Ababa by 3.4%. Between the two periods, 14.8 million of the Ethiopian population was food poor. However, the national absolute food poverty was substantially reduced from 24.8% in 2015/16 to 14.4% in 2021/22, a poverty reduction of 10.4% over the six-years period (FDRE, 2018). On average, food poverty was decreasing by about 1.7% every year.

Table 9.9: Absolute food poverty rates across regions

Regions	Food poverty rate 9%)			Absolute food poor population (million)
	2018/19 (wave4)	2021/21 (wave5)	Changes (wave5-wave4)	
Oromia	13.2	19.4	6.2	7.58
Addis Ababa	6.4	9.8	3.4	0.37
Dire Dawa	8.8	7.4	-1.4	0.04
Harari	5.6	4.2	-1.4	0.01
SNNP	37.2	30.3	-6.9	4.01
Amhara	26.2	17.5	-8.7	3.94
Somali	22.9	13.6	-9.3	0.86
Afar	13.7	2.9	-10.8	0.06
Gambella	23	11.1	-11.9	0.05
Benishangul Gumuz	20.6	6.6	-14	0.08
National	18.3	14.4	-3.9	14.77

Source: Computed from LSMS data in the World Bank

Poverty reduction was more pronounced in rural Ethiopia (Table 9.10). Absolute poverty reduced from 46.7 % to 39 % between the two periods (2.6% per year). Poverty reduction in urban Ethiopia was small (about 0.9% per year).

Table 9.10: Poverty rate by place of residence

Place of residence	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Rural	46.7	39	-7.7
Urban	15.11	12.4	-2.7
Total	30.9	26.1	-4.8

Source: Computed from LSMS data in the World Bank

9.5. Depth and Severity of Poverty

One of the disadvantages of the headcount ratio is that it ignores the depth of poverty. It tells us nothing about the depth of poverty. It ignores how far households are located below the poverty line. This can be addressed by the poverty gap index, which is a better measure of poverty.

The depth of poverty in Ethiopia significantly increased in many regions (Table 9.11). The depth of absolute poverty between the two periods increased (got deeper) in Oromia (1.9%), Addis Ababa (0.9%), and Dire Dawa (0.6%). The depth of poverty in all the other regions was reduced at different rates. Depth of poverty was substantially reduced in Amhara (9.6%), Gambella (7%), Benishangul-Gumuz (6.3%), Afar (6.1%), and Somali (4.4%). Depth of poverty was little reduced in SNNP (2.3%), and Harari (0.7%).

Table 9.11: Depth of absolute poverty across regions (2021/22)

Regions	Depth of poverty (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Oromia	8.6	10.54	1.94
Addis Ababa	1.2	2.13	0.93
Dire Dawa	4.7	5.29	0.59
Harari	3	2.34	-0.66
SNNP	18.4	16.09	-2.31
Somali	15.3	10.93	-4.37
Afar	11	4.92	-6.08
Benishangul Gumuz	10.6	4.28	-6.32
Gambella	13.5	6.53	-6.97
Amhara	17	7.45	-9.55
National	10.7	8.03	-2.67

Source: Computed from LSMS data in the World Bank

The poverty severity index describes the distribution of expenditure among poor. The estimates of poverty severity are consistent with the depth of poverty discussed above (Table 9.12). Regions that could reduce depth of poverty could also reduce poverty severity as it is related to the pro-poor growth policy pursued.

Table 9.12: Severity of absolute poverty across regions (2021/22)

Regions	Severity of poverty %		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Oromia	2.1	2.48	0.38
Addis Ababa	0.2	0.25	0.05
Harari	0.6	0.35	-0.25
Dire Dawa	1.1	0.59	-0.51
SNNP	5.3	4.55	-0.75
Somali	4.2	3.01	-1.19
Benishangul Gumuz	2.3	0.52	-1.78
Gambella	3.3	1.41	-1.89
Afar	2.9	0.47	-2.43
Amhara	4.6	1.44	-3.16
National	2.8	1.86	-0.94

Source: Computed from LSMS data in the World Bank

9.6. Decomposition of Poverty

Regional states have significantly different contributions to the national absolute poverty (Table 9.13). The relative contribution of regions to the incidence of national absolute poverty between the two periods is mainly attributable to SNNP (6.7%), Somali (3.4%), Afar (1.6%), and Addis Ababa (1.3%). Amhara (-11.6%) and Oromia (-2.9%) had negative contributions or poverty-reducing role to the national poverty incidence. Other regions have a relative contribution between 0 and 1%.

Table 9.13: Relative contribution of regions to absolute poverty in Ethiopia

Regions	Relative contribution to poverty		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
SNNP	24.0	30.7	6.7
Somali	1.5	4.9	3.4
Afar	0.1	1.7	1.6
Addis Ababa	0.1	1.4	1.3
Benishangul Gumuz	0.1	0.7	0.6
Gambella	0.0	0.4	0.4
Dire Dawa	0.0	0.3	0.3
Harari	0.0	0.1	0.1
Oromia	42.3	39.4	-2.9
Amhara	31.9	20.3	-11.6

Source: Computed from LSMS data in the World Bank

The relative contribution of rural and urban areas to the national poverty rate was also significantly different (Table 9.14). Around 94 percent of the absolute poverty in Ethiopia was attributable to rural areas. Poverty reduction efforts targeting rural areas and smallholder households will enable to significantly and rapidly reduce poverty in Ethiopia.

Table 9.14: Relative contribution of rural and urban areas to absolute poverty

Survey year	Place of residence	
	Rural	Urban
2018/19 (wave4)	93.8	6.2
2021/22 (wave5)	94.6	5.4
Changes (wave5-wave4)	0.8	-0.8

Source: Computed from LSMS data in the World Bank

Except for Benishangul-Gumuz, the poverty elasticity of growth in the two periods was reduced in all regional states (Table 9.15). Unlike city administrations (Addis Ababa and Dire Dawa) and Harari region, poverty reduction was relatively more responsive. Poverty is more responsive to growth in Benishangul-Gumuz, Amhara, Somali, SNNP, Gambella, and Oromia. Responsiveness of poverty to national economic growth was slightly increased by 0.28%, verifying that poverty reduction interventions in Ethiopia were less effective.

Table 9.15: Poverty elasticity with respect to growth

Regions	Elasticity (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Benishangul Gumuz	-1.44	-1.26	0.18
Amhara	-1.73	-1.81	-0.08
Somali	-1.42	-1.58	-0.16
SNNP	-1.20	-1.41	-0.21
Gambella	-1.07	-1.30	-0.23
Oromia	-1.38	-1.76	-0.38
Harari	-0.72	-1.35	-0.63
Afar	-1.29	-2.09	-0.8
Addis Ababa	-0.42	-1.43	-1.01
Dire Dawa	-0.75	-1.88	-1.13
National	-1.40	-1.68	-0.28

Source: Computed from LSMS data in the World Bank

9.7. Inequality

The national inequality in Ethiopia was reduced from 41.9 percent in 2018/19 to 39.3 percent in 2021/22 (Table 9.16). Inequality in the two periods was significantly higher than the 33 percent rate estimated in 2015/16. Inequality was largely reduced in SNNP (6.7%), Benishangul-Gumuz (by 6.6%), Amhara (by 4.3%), and Gambella (by 3.7%). Small reduction of inequality was observed nationally and in Afar and Harari regions. On the other hand, inequality was increased in Oromia (by 3.1%), Dire Dawa (by 2.5%), Somali (1.5%), and Addis Ababa (1.2%).

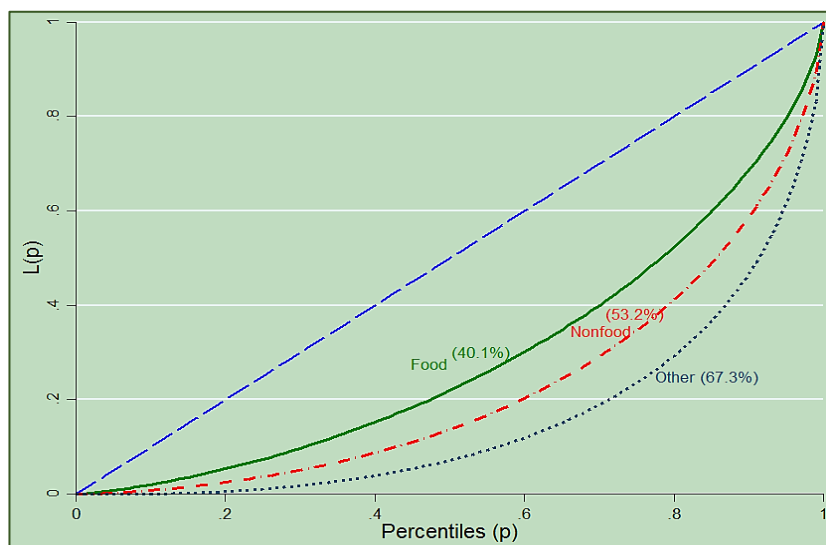
Table 9.16: Regional distribution of inequality in Ethiopia

Regions	Gini index (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Oromia	35.6	38.7	3.1
Dire Dawa	35.3	37.8	2.5
Somali	38.4	39.9	1.5
Addis Ababa	34.2	35.4	1.2
Harari	38.9	37.2	-1.7
Afar	39	36.2	-2.8
Gambella	44.5	40.8	-3.7
Amhara	39.5	35.2	-4.3
Benishangul Gumuz	39.9	33.3	-6.6
SNNP	47.6	40.9	-6.7
National	41.9	39.3	-2.6

Source: Computed from LSMS data in the World Bank

The rate of inequality among households by items of consumption expenditure substantially varies (Figure 9.2). The rates of inequality for nonfood (53.2%) and other items of expenditure (67.3%) were very high. The inequality for food is 40.1%, which was nearly equals the overall inequality estimated for 2021/22.

Figure 9.2: Lorenz and concentration curves of real consumption expenditure (2021/22)



Source: Computed from LSMS data in the World Bank

Inequality is expected to aggravate poverty. There has not been significant change in the elasticity of poverty with respect to inequality in most of the regions (Table 9.17). The poverty effect of inequality was more pronounced in Afar, Somali, Amhara, and Benishangul-Gumuz. The poverty effect of inequality in Ethiopia was generally low with slight changes between the two periods.

Table 9.17: Poverty elasticity with respect to inequality

Regions	Elasticity (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Afar	-3.90	3.15	7.05
Somali	0.30	1.74	1.44
Amhara	0.42	1.22	0.8
Benishangul Gumuz	-3.62	-3.07	0.55
Gambella	-0.04	-0.02	0.02
SNNP	0.41	0.42	0.01
Harari	-0.00	0.00	0
Dire Dawa	-0.02	-0.02	0
Oromia	0.99	0.81	-0.18
Addis Ababa	-0.34	-0.52	-0.18
National	0.68	0.83	0.15

Source: Computed from LSMS data in the World Bank

The total effect of growth and inequality on poverty was measured by the total elasticity of poverty with respect to growth and inequality. As discussed above, poverty effect of growth and inequality was more pronounced between the two periods in Afar, Somali, and Benishangul-Gumuz (Table 9.18). Total responsiveness of poverty between the two periods shows that the effect of growth on poverty reduction outweighs the effect of inequality on poverty rise.

Table 9.18: Total poverty elasticity with respect to growth and inequality

Regions	Total elasticity of poverty (%)		
	2018/19 (wave4)	2021/22 (wave5)	Changes (wave5-wave4)
Afar	-5.19	1.06	6.25
Somali	-1.12	0.16	1.28
Benishangul Gumuz	-5.06	-4.33	0.73
Amhara	-1.31	-0.59	0.72
SNNP	-0.79	-0.99	-0.2
Gambella	-1.11	-1.32	-0.21
Oromia	-0.39	-0.95	-0.56
Harari	-0.72	-1.35	-0.63
Dire Dawa	-0.77	-1.9	-1.13
Addis Ababa	-0.76	-1.95	-1.19
National	-0.72	-0.85	-0.13

Source: Computed from LSMS data in the World Bank

9.8. Pro-Poor Growth

Pro-poor policy is one that directly targets poor people, or that is more generally aimed at reducing poverty. It is an inclusive growth policy that enables the poor to actively participate in and significantly benefit from economic activity, which is the major departure from the trickle-down concept of development. Growth is pro-poor (not pro-poor) if the change in inequality that accompanies growth reduces (increases) the total poverty (Kakwani, 2004).

9.8.1. Poverty effects of growth and redistribution

The total effects of average income growth per adult equivalent between the two waves were negative in both rural and urban areas, indicating that poverty was reduced at different levels (Table 9.19). Absolute poverty was reduced by 5.9% in rural and by 0.4 % in urban areas. However, growth has reduced poverty by 4% in rural areas, but aggravated poverty in urban areas by about 3%. The poverty reduction effect of redistribution, on the other hand, was relatively smaller (1.9%) in rural areas but larger in urban areas (3.5%). Overall, poverty was reduced more among rural households compared to their urban counterparts. The negative income growth was accompanied by larger poverty bias³⁰ of growth in urban areas. Growth policies pursued in urban Ethiopia were not pro-poor and strongly increased poverty.

Table 9.19: Poverty effects of growth and redistribution by place of residence (2018/19-2021/22)

Sources of poverty changes	Poverty effects on (%)	
	Rural	Urban
Growth	-4.01	3.1
Redistribution	-1.87	-3.52
Total effect (wa5-w4)	-5.88	-0.38
Poverty bias of growth (PBG)	1.87	3.52
Growth policy	Pro-poor	Not pro-poor

Source: Computed from LSMS data in the World Bank

³⁰ Despite the rise or fall of poverty, growth is generally biased against the poor if poverty reduction is accompanied by an increase in inequality, because a greater reduction in poverty would occur if there is no distributional shift of income. The poverty bias of growth is the negative of the inequality component obtained from decomposition of poverty with respect to growth and redistribution.

The effects of growth of real consumption expenditure per adult equivalent and consumption inequality on poverty changes³¹ between 2018/19 and 2021/22 significantly differ across regions of Ethiopia (Table 9.20).

- Growth has substantially increased poverty in Dire Dawa (by 19.6%), Addis Ababa (by 12%), Harari (by 9.6%), and SNNP (by 4.6%).
- Growth has significantly reduced poverty in Amhara (by 16.3%), Somali (by 16%), and Afar (by 6%).
- The poverty effect of growth on poverty reduction in Ethiopia was negligible (0.1%).
- Redistribution has significantly caused poverty to rise in Oromia (by 3.8%) and Harari (by 1.6%).
- Redistribution significantly helped for poverty reduction in Benishangul-Gumuz (by 18.8%), Amhara (by 11.2%), SNNP (by 9%), and Somali and Dire Dawa (by 5.4%).
- Income redistribution has helped reduce poverty in Ethiopia by 4.2%.
- The largest total poverty effects of growth and redistribution was observed in Amhara (27.5%), Somali (21.4%), and Benishangul-Gumuz (20.1%).
- Growth and redistribution in Gambella (5.8%), Afar (5.7%), and SNNP (4.4%) have moderate poverty reduction effects.

³¹ Decomposition of the actual percentage change in poverty indices into "pure growth" and "pure inequality change" components enables to identify and estimate the effect of growth and inequality on poverty changes. The poverty bias of growth (PBG) is just the negative sign of the inequality effect. It measures pro-poor growth and captures the impact of changes in the distribution on poverty.

- Poverty increased due to growth and redistribution in Dire Dawa (by 14.2%), Harari (by 11.2%), Addis Ababa (by 8.8%), and Oromia (by 6.2%). Growth policies pursued between 2019/19 and 2021/22 in these regions were not pro-poor. Growth was particularly strongly anti-poor in Oromia and Harari regional states.

Table 9.20: Poverty effects of growth and redistribution across regions (2018/19- 2021/22)

Region	Effects on poverty changes (%)				Growth policy
	Growth	Redistribution	Total effect (wave5-ave4)	Poverty bias of growth (PBG)	
Dire Dawa	19.64	-5.40	14.24	5.40	No pro-poor
Harari	9.62	1.61	11.24	-1.61	No pro-poor
Addis Ababa	12.05	-3.28	8.76	3.28	No pro-poor
Oromia	2.43	3.76	6.19	-3.76	No pro-poor
SNNP	4.63	-8.99	-4.36	8.99	Pro-poor
Afar	-5.99	0.30	-5.70	-0.30	Pro-poor
Gambella	-3.66	-2.11	-5.77	2.11	Pro-poor
Benishangul Gumuz	-1.32	-18.78	-20.10	18.78	Pro-poor
Somali	-15.99	-5.40	-21.40	5.40	Pro-poor
Amhara	-16.33	-11.20	-27.53	11.20	Pro-poor
National	-0.10	-4.15	-4.25	4.15	Pro-poor

Source: Computed from LSMS data in the World Bank

9.8.2. *Pro-poor indices*

Productivity improvements in agriculture are a primary determinant of pro-poor growth, particularly in countries like Ethiopia where the poor are predominantly rural whose livelihoods are based on agriculture. Agricultural productivity can be improved through research and extension, adequate supply of agricultural inputs, improved rural infrastructure, and access to agricultural credit and insurance.

The pro-poor growth indices for rural and urban Ethiopia clearly show that growth policies pursued between 2018/19 and 2021/22 were generally pro-poor in rural Ethiopia and not pro-poor in urban Ethiopia (Table 9.21). The pro-poor growth index (PPGI) was below zero indicating that growth in urban Ethiopia was not pro-poor but caused poverty. The decline in real consumption expenditure per adult equivalent in urban Ethiopia has led to increased poverty. The effective growth rate for poverty reduction measured by the poverty equivalent growth rate (PEGR) in urban Ethiopia was also below one, suggesting the policy pursued in urban Ethiopia was not pro-poor.

Table 9.21: Pro-poor indices between 2018/19 and 2021/22 by place of residence

Pro-poor indices (headcount ratio)	Place of residence	
	Rural	Urban
Actual growth rate (%)	4.6	-6.6
Pro-poor growth index	1.687	-8.8
Poverty equivalent growth rate (%)	7.8	0.58
Growth policy	Pro-poor	Not pro-poor

Source: Computed from LSMS data in the World Bank

Pro-poor indices estimated for regional states in Ethiopia are consistent with other measures of pro-poor growth discussed above (Table 9.22). Afar, Amhara, Somali, Benishangul-Gumuz, SNNP, and Gambella pursued pro-poor growth policies between the two periods. The national growth policy was also pro-poor. On the other hand, growth policies pursued in Oromia and Harari regional states and the two city administrations were not pro-poor.

Table 9.22: Pro-poor indices between 2018/19 and 2021/22 across regions of Ethiopia

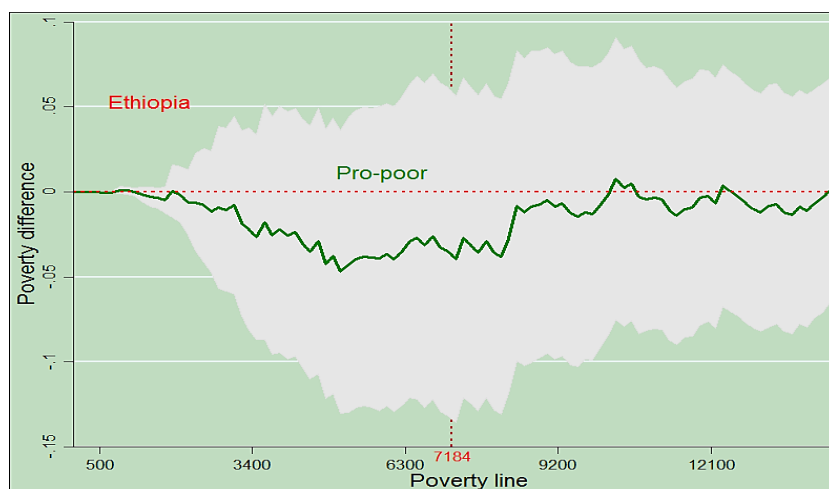
Regions	Actual growth rate (%)	Pro-poor growth index	Poverty equivalent growth rate (%)	Growth policy
Afar	13.9	0.746	10.3	Pro-poor
Amhara	25.5	1.760	44.9	Pro-poor
Oromia	-5.5	1.794	-9.8	Not pro-poor
Somali	28.6	1.505	43	Pro-poor
Benishangul Gumuz	3.7	9.030	33.8	Pro-poor
SNNP	-9.8	-0.954	9.4	Pro-poor
Gambella	13.2	1.469	19.3	Pro-poor
Harari	-11.4	2.549	-29.1	Not pro-poor
Addis Ababa	-34.5	0.699	-24.1	Not pro-poor
Dire Dawa	-32.6	0.952	-31	Not pro-poor
National	0.2	21.245	3.9	Pro-poor

Source: Computed from LSMS data in the World Bank

9.8.3. Pro-poor growth curves

Ethiopia: The absolute pro-poor growth³² curve for Ethiopia shows that pro-poor growth policy was pursued between 2018/19 and 2021/22 (Figure 9.3). Poverty in Ethiopia was generally reduced where the poor benefited more compared to their nonpoor counterparts. Most of the poor households below the poverty line (ETB 7184) benefited relatively more due to the pro-poor policy pursued in Ethiopia. However, the poverty changes arising from pro-poor growth was negligible and varied between -5% among the poor to 0% among the nonpoor.

Figure 9.3: Pro-poor growth in Ethiopia

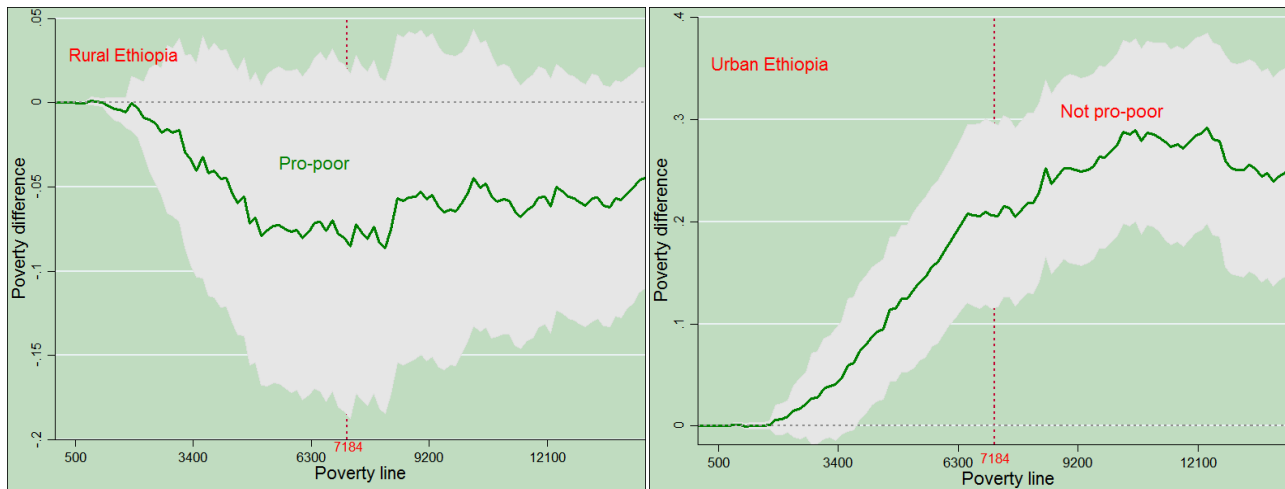


Source: Computed from LSMS data in the World Bank

³² Growth in this case refers to the growth of real consumption expenditure per adult equivalent, not aggregate economic welfare measures such as real output growth or real GDP per capita. Pro-poor growth is measured by the welfare outcomes of policies formulated and implemented. Policies are often formulated and implemented to affect the output in the supply side. But pro-poor growth is measured in the demand side using household real expenditure per adult equivalent.

Pro-poor growth policy in Ethiopia significantly varies by rural-urban settings (Figure 9.4). In rural Ethiopia, poverty was reduced among all rural households (left panel of the figure). Pro-poor growth policies between 2018/19 and 2021/22 were poverty reducing. However, poverty in urban Ethiopia was increased among both the poor and nonpoor (right panel of the figure). Impoverishment was rising with income for both the poor and the nonpoor. Growth policy and development interventions in urban Ethiopia didn't directly target the poor or are not aimed at reducing poverty. Overall, growth policies in urban Ethiopia have caused impoverishment and worsened the welfare of households.

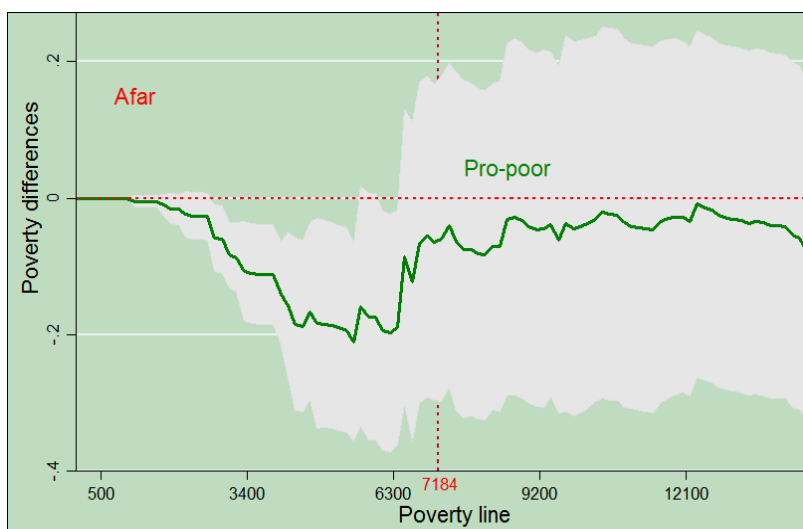
Figure 9.4: Pro-poor growth in rural and urban Ethiopia



Source: Computed from LSMS data in the World Bank

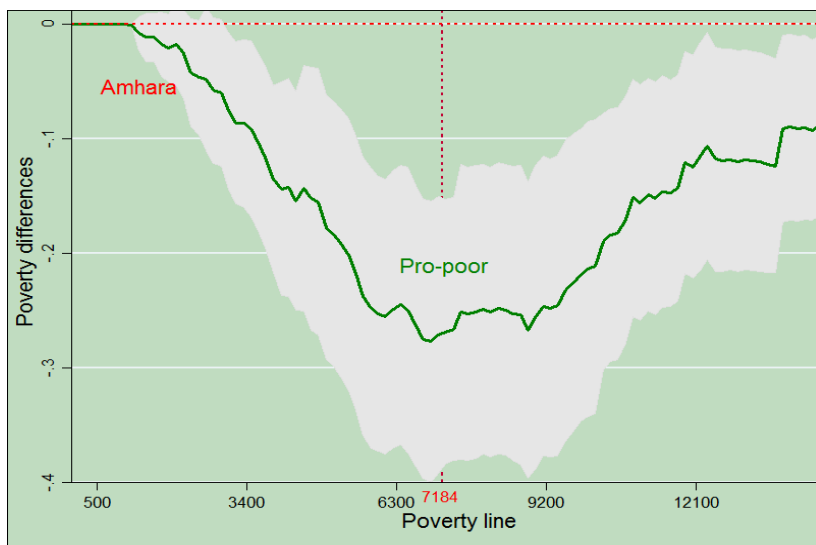
Afar: Afar regional pursued pro-poor growth policy between 2018/19 and 2021/22 (Figure 9.5). The incidence of absolute poverty was reduced for both the poor and nonpoor. The poverty changes arising from the growth policy vary between -20% among the poor to around 0% among the nonpoor.

Figure 9.5: Pro-poor growth in Afar region



Source: Computed from LSMS data in the World Bank

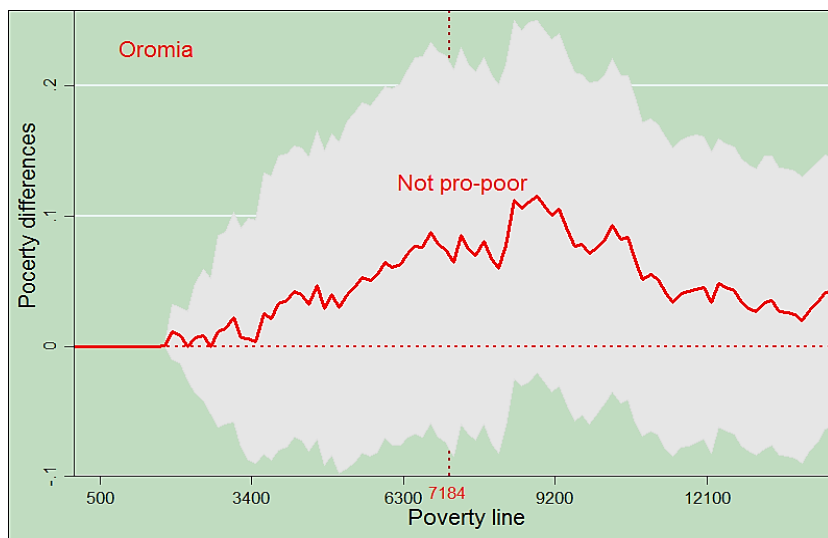
Amhara: Poverty was substantially reduced in Amhara region between 2018/19 and 2021/22 (Figure 9.6). Both the poor and the nonpoor households benefited more from the poverty reduction realized in the region. However, the poor experienced relatively more gains from the poverty reduction policy. Compared to other regions, poverty reduction was more in Amhara region for both the poor and the nonpoor. Growth policies were aimed at reducing poverty. The poverty changes between the two periods vary between -30% among the poor to -10% among the nonpoor.

Figure 9.6: Pro-poor growth in Amhara region

Source: Computed from LSMS data in the World Bank

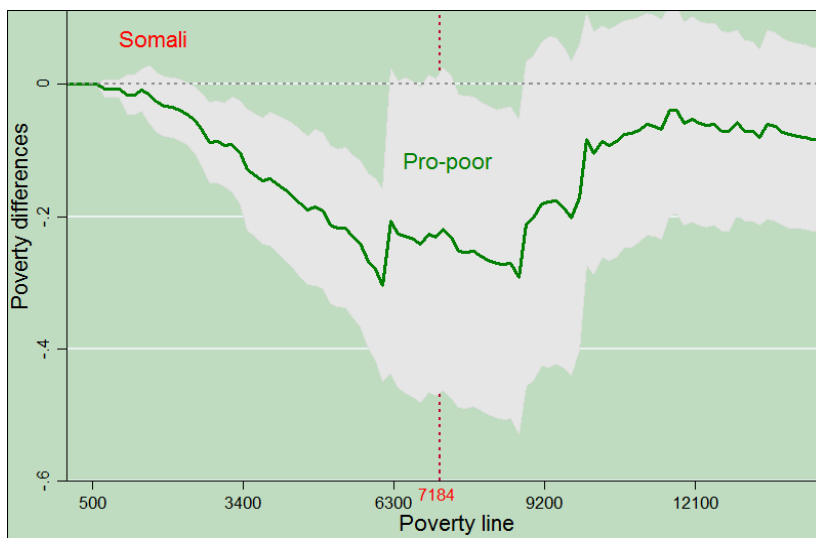
Oromia: Between 2018/19 and 2021/22, the growth policy pursued in Oromia region was not pro-poor (Figure 9.7). Poverty was significantly increased and the welfare of both the poor and nonpoor households was substantially eroded. Growth policies in the region were not aimed at reducing poverty. Rise in poverty ranges from 0% and 10% among the entire households.

Figure 9.7: Growth policy in Oromia region was not pro-poor



Source: Computed from LSMS data in the World Bank

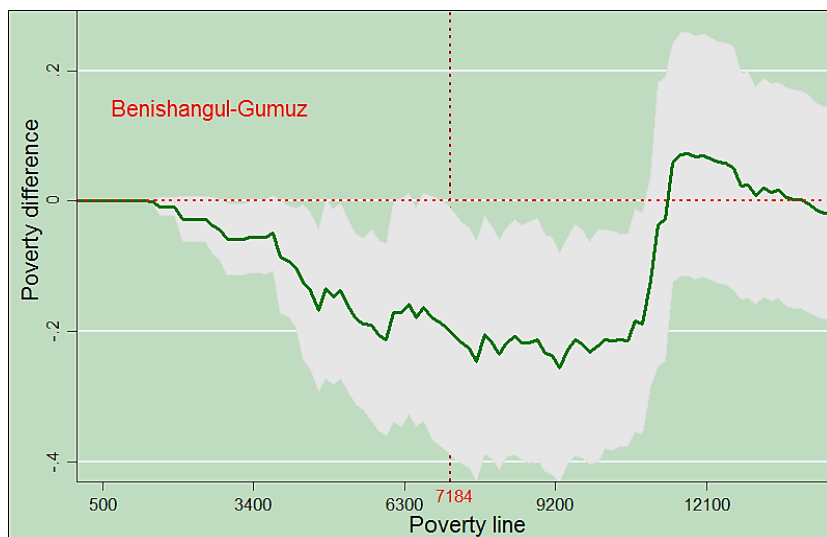
Somali: Growth policy in Somali region was pro-poor between the two periods (Figure 9.8). Poverty was reduced and both the poor and the non-poor benefited. Compared to the nonpoor, however, the poor households obtained more propositional gains from the growth process and poverty reduction policy. Growth polices in the region were generally aimed to reduce poverty. The poverty changes between the two periods vary between -30% among the poor and -10% among the nonpoor.

Figure 9.8: Pro-poor growth in Somali region

Source: Computed from LSMS data in the World Bank

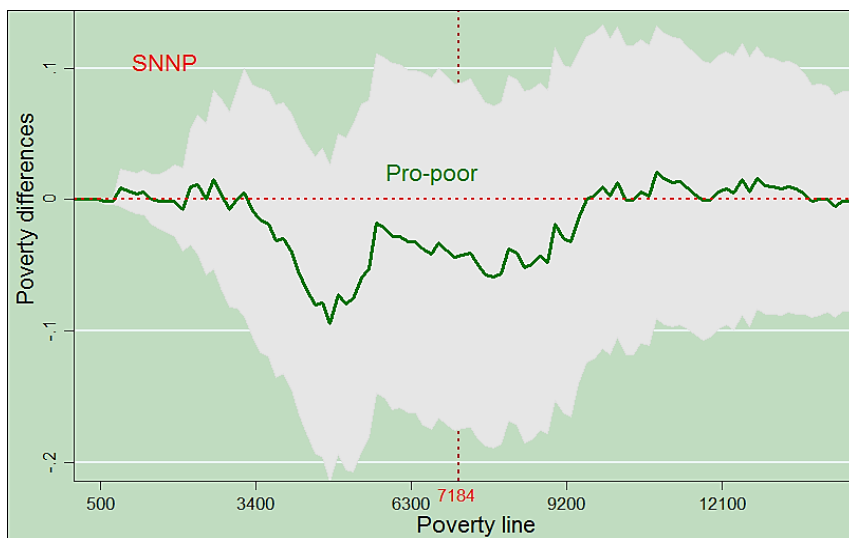
Benishangul-Gumuz: Between the two periods, poverty was reduced in Benishangul-Gumuz (Figure 9.9). Both the poor and the nonpoor benefited from the pro-poor growth policy pursued in the region. The growth policy particularly enabled the poor to benefit relatively more from the poverty reduction. Growth policies in the region targeted the poor or were aimed at reducing poverty.

Figure 9.9: Pro-poor growth in Benishangul Gumuz region



Source: Computed from LSMS data in the World Bank

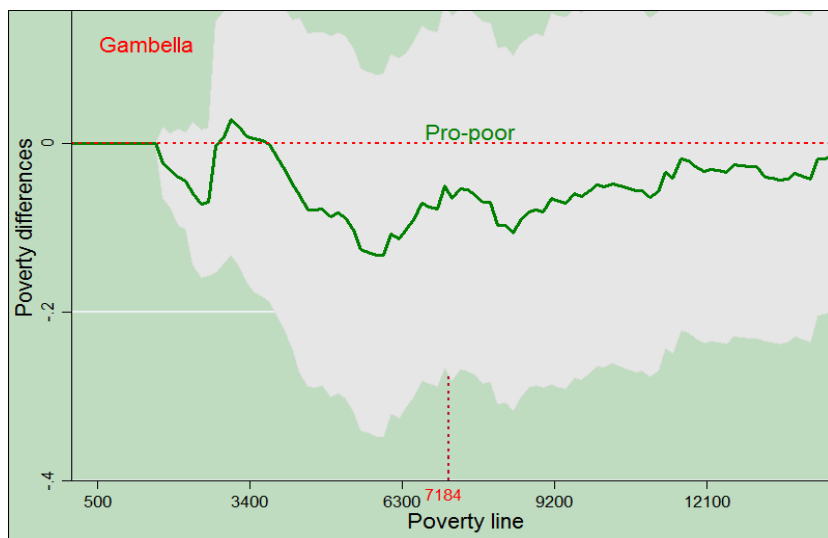
SNNP: Poverty in SNNP region was reduced between the two periods (Figure 9.10). The poor benefited more and the nonpoor less from the growth policy pursued in the region. Compared to other regions, poverty reduction was relatively low in the region. Growth policies in the region were slightly aimed to reduce poverty. The poverty changes between the two periods vary between -10% among the poor and around 0% among the nonpoor.

Figure 9.10: Pro-poor growth in SNNP region

Source: Computed from LSMS data in the World Bank

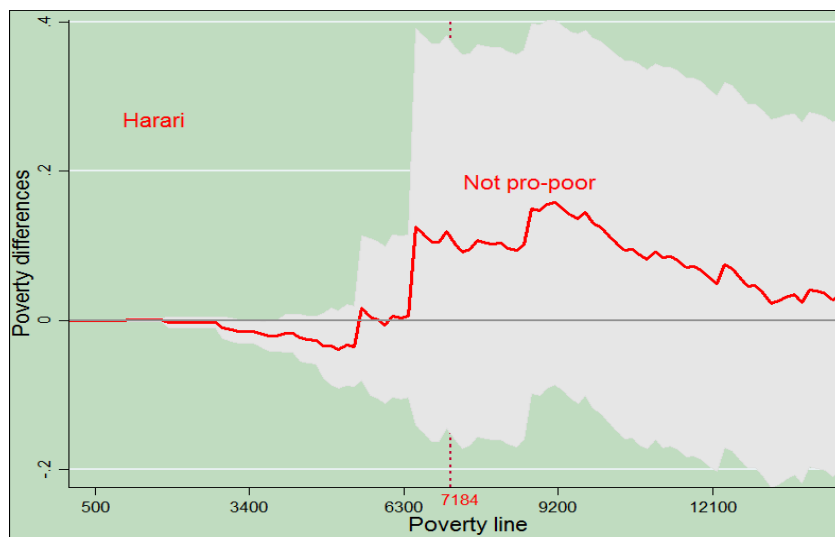
Gambella: Due to the pro-poor growth policy, poverty was reduced in Gambella region between the two periods (Figure 9.11). The poor relatively benefited more from the growth process. Growth policies in the region were generally aimed at reducing poverty. However, the poverty change between the two periods was small and varied between around -10% among the poor and below 0% among the nonpoor.

Figure 9.11: Pro-poor growth in Gambella region



Source: Computed from LSMS data in the World Bank

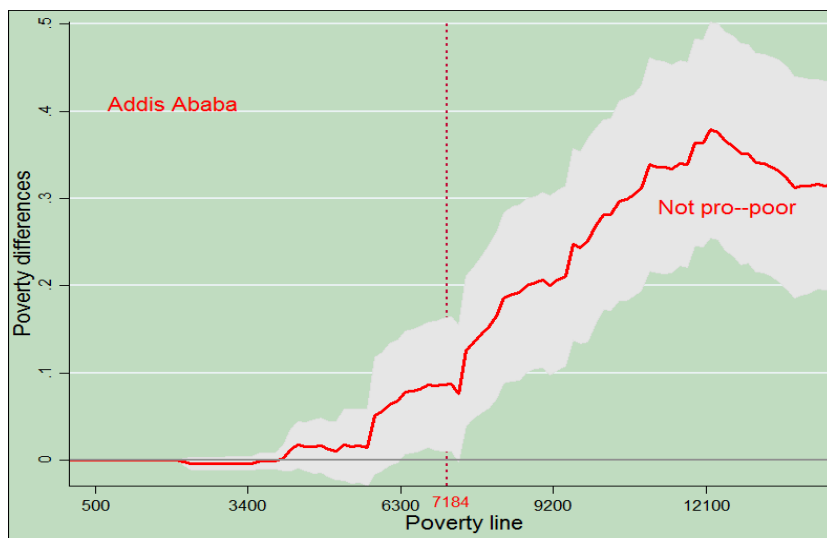
Harari: Between the two periods, growth policy in Harari region was not pro-poor (Figure 9.12). Except for a few households with negligible gains, the welfare of almost all nonpoor households was significantly eroded. The welfare loss experienced by nonpoor households with lower income was relatively higher compared to those with higher income. Poverty increased because the growth policies in the region did not target the poor or policy intervention were not aimed at reducing poverty. The poverty changes vary between around -5% among the poor and around 20 percent among the nonpoor.

Figure 9.12: Growth policy in Harari region was not pro-poor

Source: Computed from LSMS data in the World Bank

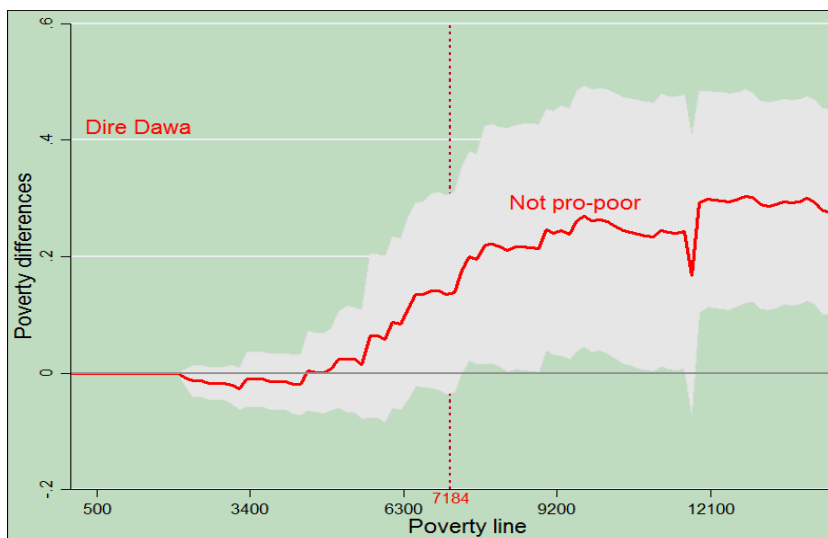
Addis Ababa: Regardless of poverty status or income level, poverty in Addis Ababa substantially increased among all households (Figure 9.13). The growth policy pursued in Addis Ababa over the period was not pro-poor. Both the poor and the nonpoor were impoverished due the substantial loss of their welfare. Poverty substantially increased because growth policies in the city did not target the poor or were not aimed at reducing poverty. The poverty changes vary between 0% among the poor and around 35% among the nonpoor.

Figure 9.13: Growth policy in Addis Ababa was not pro-poor



Source: Computed from LSMS data in the World Bank

Dire Dawa: The growth policy pursued in Dire Dawa between 2018/19 and 2021/22 was not different from the one pursued in Addis Ababa (Figure 9.14). The growth policy pursued in the city was not pro-poor. The welfare loss experienced by households increases with income level, which is somehow like the situation in Addis Ababa. The poor and poverty were not duly targeted in the growth policies and development interventions.

Figure 9.14: Growth policy pursued in Dire Dawa was not pro-poor

Source: Computed from LSMS data in the World Bank

9.9. Concluding Remarks

Using the LSMS datasets for 2018/19 and 2021/22, this paper rigorously investigates and estimates poverty and inequality at the 2015/16 national poverty lines. It also examines the pro-poor growth and pro-poor growth policies pursued at national and regional levels.

Poverty was generally increasing in Ethiopia. Except for households in the highest expenditure qualities (4 and 5), real consumption expenditure was reduced between 2018/19 and 2021/22. The poor were particularly becoming poorer between the two periods. Though the national absolute poverty rate was reduced from 30.9% in 2018/19 to 26.1% in 2021/22, poverty rates in both years are by far higher than the poverty rate in 2015/16 (24%). Poverty was particularly increased in Oromia, Harari, Addis Ababa, and Dire Dawa. On the other hand, poverty was substantially reduced in Amhara, Gambella, and

Benishangul Gumuz regions. Poverty reduction was more pronounced in rural Ethiopia.

The national inequality rate was slightly reduced from 41.9% in 2018/19 to 39.3% in 2021/22. However, inequality increased in Oromia, Dire Dawa, and Somali. It was substantially reduced in SNNP, Benishangul Gumuz, and Amhara regional states. Poverty was less elastic to growth and inequality between the two periods.

The growth policies pursued by many regional states were not pro-poor. Oromia and Harari regional states pursued growth policies that are not pro-poor and strongly eroding the welfare of both the poor and the nonpoor. Similarly, the growth policies pursued in Addis Ababa and Dire Dawa city administrations were not pro-poor. The growth policies perused by these regional states and city administrations contradict aspirations of the nation to reduce poverty. These regional states, city administrations, and other urban centers should formulate and implement pro-poor growth policies that can enhance the poverty reduction efforts of the country.

Poverty in Ethiopia generally increased over the period. Conflicts and instabilities strongly constrained and stagnated productive capacities to produce goods and services, thereby leading to high and persistent inflation that eroded the welfare of citizens (see the findings in Chapter 2). The stagnation of productive capacities leads to shortage of goods and services and macroeconomic instability. Violent conflicts lead to high levels of fatalities and displacement of people, material destruction, and state collapse (Verstegen, 2001). Consequently, considerable proportion of the population descended to absolute poverty. The government and other primary actors of the conflict should be committed and aggressively work to restore peace and order and enhance the productive capacity of the nation to produce, distribute, market, and consume more goods and services.

References

- Araar, A. (2012). Expected Poverty Changes with Economic Growth and Redistribution, "Cahiers de recherche 1222, CIRPEE.
- Araar, A. and J-Y. Duclos. (2007). Poverty and inequality components: a micro framework, Working Paper: 07-35. CIRPEE, Department of Economics, Université Laval.
- _____. (2013). DASP: Distributive Analysis Stata Package, User Manual, DASP version 2.3, PEP, World Bank, Université Laval, p150.
- Ernesto Pernia, E. N. Kakwani. (2000). What is Pro-poor Growth? Econ Papers, available at <https://econpapers.repec.org/paper/pramprapa/104987.htm>
- FDRE (Federal Democratic Republic of Ethiopia). (2018). Poverty and Economic Growth in Ethiopia (1995/96-2015/16), Planning and Development Commission, Addis Ababa, Ethiopia.
- Foster, J., J. Greer and E. Thorbecke. (1984). A class of decomposable poverty measures, *Econometrica* 52:761-766.
- Haughton, J. & S. Khandker. (2009). Handbook on poverty and inequality, Washington, DC: World Bank.
- Kakwani N. and H. Son. (2008). Review of Income and Wealth, vol. 54, issue 4, 643-655
- _____. (2004). Pro-Poor Growth: Concepts and Measurement with Country Case Studies, Working Paper 1, International Poverty Center, UNDP available at <https://www.ipc-undp.org/pub/IPCWorkingPaper1.pdf>
- Neil McCulloch & Mc & B. Baulch. (2000). Simulating the Impact of Policy upon Chronic and Transitory Poverty in Rural Pakistan, available at <https://econpapers.repec.org/paper/wpawuwpm/0004003.htm>
- Ravallion, M. & S. Chen. (2003). Measuring pro-poor growth, Economics Letters, Elsevier, vol. 78(1), pp: 93-99, available at <https://ideas.repec.org/a/eee/eolet/v78y2003i1p93-99.html>
- Versegen, S. (2001). Poverty and Conflict: An Entitlement Perspective, CBN Briefing Paper, Stiftung Wissenschaft und Politik (SWP), available at https://www.clingendael.org/sites/default/files/2016-02/20010900_cru_other_verstegen.pdf

10. POLICY AND GOVERNANCE

10.1. Introduction

Ethiopia has been substantially challenged over the last few years. Some of these challenges include increasing domestic conflicts and political violence, high inflation eroding the welfare of citizens and severely affecting the effectiveness of macroeconomic policies, and external shocks including the Russia-Ukraine war, Sudan domestic conflict, and Israel-Gaza war. These challenges are expected to adversely affect the Ethiopian economy in multiple dimensions.

This chapter rigorously investigates the states of development policies, institutions, and governance and their systematic link with economic and social progress in Ethiopia. Development policy includes political, economic and social measures taken to improve living conditions in a sustainable way. Policy analysis is important to identify and choose potential policy options that could address the problem most effectively, efficiently, and feasibly. It enables us to assess whether policy interventions are undertaken in a systematic manner and to choose the option that fits best in addressing the problem.

This chapter assesses 16 policies and institutional arrangements and measures their prudence, consistency, and dynamic link with socioeconomic development. These policies, aggregated into four major policy and institutional categories, are used to compute a unique policy index for Ethiopia.

The dynamics of governance in Ethiopia is also investigated over the last decade. The five determinants of governance and their trends are investigated and reported (Bertelsman Stiftung (BS), 2022). The level of governance difficulty, steering capability, resource efficiency, consensus-building and international cooperation are assessed. The

effect of governance on socioeconomic development is investigated and reported.

Domestic conflicts and political instabilities in Ethiopia are widespread and expected to adversely constrain socioeconomic progress. Conflict intensity of a country is indicated by the confrontational nature of politics, the polarization and split of society along several cleavages, the mobilization of large groups of the population, and the use and spread of violence. Conflict intensity will be very high if fundamental political, social, ethnic or religious differences that fuel civil war or widespread violent conflict are observed (BS, 2022). The domestic conflicts and political instabilities are expected to severely affect productive capacities of the nation to produce more goods and services supposed to stabilize macroeconomic instabilities.

This chapter is, therefore, aimed to assess the state of governance, policies and institutional arrangements, domestic conflicts and political violence, and their economic impacts in Ethiopia. It particularly aims to address the following specific research questions:

1. Are development policies and institutional arrangements relevant, consistent, and complementary?
2. To what extent is sustainable growth and poverty reduction supported by institutional frameworks and arrangements?
3. Can the government effectively manage reforms and achieve its policy priorities?
4. What causes/drives conflicts and political violence in Ethiopia?
5. Is the Ethiopian economy significantly impacted by domestic conflicts and political violence?

10.2. Data and Methods

To investigate the perceived impacts of domestic conflicts and political violence in Ethiopia, primary data from an expert survey of EEA members was utilized. Expert opinion survey was conducted and around 320 EEA members have responded to the online questionnaire in January 2024.

Secondary data on quality of country policies and institutional arrangements, development indicators, debt, governance, and conflicts and political violence was collected from the following official sources:

- National Bank of Ethiopia (NBE)
- Ministry of Finance (MoF) of the Ethiopian government
- Armed Conflict Location and Event Data (ACLED)
- Bertelsmann Stiftung (BT)
- The World Bank.

To analyze the data, both parametric and nonparametric methods were employed. Nonparametric methods including pairwise correlations, scatter plots, timeseries line plots, and indexing were employed. Regression-based decomposition of aggregate variables was also widely used.

10.3. Definition of Variables

10.3.1. Policy

Country Policy and Institutional Assessment (CPIA): The World Bank's Country Policy and Institutional Assessment (CPIA) measures the quality of policies and institutional arrangement in countries around the world. It reports 16 policies and institutional ratings clustered into four categories. The CPIA “measures the extent to which a country's policy and institutional framework supports sustainable growth and

poverty reduction and, consequently, the effective use of development assistance” (World Bank, 2024).

Economic management (1=low to 6=high): It measures macroeconomic management, fiscal policy, and debt policy.

- **Macroeconomic management** assesses the monetary, exchange rate, and aggregate demand policy framework.
- **Fiscal policy** assesses the short- and medium-term sustainability of fiscal policy (considering monetary and exchange rate policy and the sustainability of the public debt) and its impact on growth.
- **Debt policy** assesses whether the debt management strategy is conducive to minimizing budgetary risks and ensuring long-term debt sustainability.

Structural policies (1=low to 6=high): This includes trade, financial sector, and business regulatory environment.

- **Trade** assesses how the policy framework fosters trade in goods.
- **Financial sector** assesses the structure of the financial sector and the policies and regulations that affect it.
- **Business regulatory environment** assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive.

Policies for social inclusion/equity (1=low to 6=high): This includes gender equality, equity of public resource use, building human resources, social protection and labor, and policies and institutions for environmental sustainability.

- **Gender equality** assesses the extent to which the country has installed institutions and programs to enforce laws and policies

that promote equal access for men and women in education, health, the economy, and protection under law.

- ***Equity of public resource use*** assesses the extent to which the pattern of public expenditures and revenue collection affects the poor and is consistent with national poverty reduction priorities.
- ***Building human resources*** assesses the national policies and public and private sector service delivery that affect the access to and quality of health and education services, including prevention and treatment of HIV/AIDS, tuberculosis, and malaria.
- ***Social protection and labor*** assess government policies in social protection and labor market regulations that reduce the risk of becoming poor, assist those who are poor to better manage further risks, and ensure a minimal level of welfare to all people.
- ***Policies and institutions for environmental sustainability*** assess the extent to which environmental policies foster the protection and sustainable use of natural resources and the management of pollution.

Public sector management and institutions (1=low to 6=high): This includes property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, and transparency, accountability, and corruption in the public sector.

- ***Property rights and rule-based governance*** assesses the extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property and contract rights are reliably respected and enforced.
- ***Quality of budgetary and financial management*** assesses the extent to which there is a comprehensive and credible budget

linked to policy priorities, effective financial management systems, and timely and accurate accounting and fiscal reporting, including timely and audited public accounts.

- ***Efficiency of revenue mobilization*** assesses the overall pattern of revenue mobilization, not only the *de facto* tax structure, but also revenue from all sources as actually collected.
- ***Quality of public administration*** assesses the extent to which civilian central government staff is structured to design and implement government policy and deliver services effectively.
- ***Transparency, accountability, and corruption in the public sector*** assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.

Policy and Institutional Index (PII): The PII, introduced in this study, is an aggregate measure of the four policy and institutional ratings into a single unique index that captures the optimal mix of policies and institutional arrangements.

10.3.2. Governance

The Bertelsmann Transformation Index (BTI) is a measure of the development status and governance of political and economic transformation processes in developing and transition countries around the world (BS, 2024). Governance is determined by the level of

governance difficulty, steering capability, resource efficiency, consensus building, and international cooperation.

Governance difficulty: Governance difficulty arises from structural constraints, conflict intensity, and civil society traditions.

- *Structural constraints* capture the extent to which structural difficulties constrain the political leadership's governance capacity. Governance performance may be limited by structural constraints that do not result from the current political leadership's actions and cannot be overcome swiftly. The level of structural constraints could be very high, fairly high, fairly low, or very low.
- *Civil society traditions* measure the extent of civil society traditions such as long-term presence of public or civic engagement, a civic culture of participation in public life, numerous and active civic associations, and social trust (social capital). Civil society traditions could be very weak, fairly weak, fairly strong, or very strong.
- *Conflict intensity* measures the seriousness of political, social, ethnic, and religious conflicts arising from the confrontational nature of politics, the polarization and split of society along one or several cleavages, the mobilization of large groups of the population, and the use and spread of violence. It could be very high, fairly high, fairly low, or very low.

Steering capability: This measures the extent to which reforms are effectively managed by the government and the capacity to achieve policy priorities. It is captured by prioritization, implementation, and policy learning.

- *Prioritization* captures the extent to which the government sets and maintains strategic priorities.

- **Implementation** captures the effectiveness of the government in implementing its own policies.
- **Policy learning** captures the innovativeness and flexibility of the government.

Resource efficiency: This measures the extent to which the government makes optimum use of available resources. It is captured by efficient use of assets, policy coordination, and anti-corruption policy.

- **Efficient use of assets** captures the extent to which available human, financial, and organizational resources are efficiently used by the government.
- **Policy coordination** captures the extent to which conflicting objectives are coordinated into a coherent policy pursued by the government.
- **Anti-corruption policy** captures the extent to which corruption is successfully contained by the government.

Consensus-building: This assumes that the political leadership establishes a broad consensus on reform with other actors in society without sacrificing its reform goals. It is captured by consensus on goals, anti-democratic actors, cleavage or conflict management, public consultation, and reconciliation.

- **Consensus on goals** captures the extent of agreement of the major political actors on democracy and a market economy as strategic, long-term goals.
- **Anti-democratic actors** capture the extent to which the reformers are able to exclude or co-opt anti-democratic actors.

- ***Cleavage/conflict management*** captures the extent to which the political leadership is able to moderate cleavage-based conflict.
- ***Public consultation*** captures the extent to which civil society actors are consulted by the government in their plurality in policymaking.
- ***Reconciliation*** captures the extent to which reconciliation between the victims and perpetrators of past injustices is brought about.

International cooperation measures the willingness and ability of the political leadership to cooperate with external supporters and organizations. It is captured by effective use of support, credibility, and regional cooperation.

- ***Effective use of support*** captures the extent to which the political leadership uses the support of international partners to implement a long-term strategy of development.
- ***Credibility*** captures the extent to which the government acts as a credible and reliable partner in its relations with the international community.
- ***Regional cooperation*** captures the extent of willingness and ability of the political leadership to cooperate with neighboring countries.

10.4. Policies and Institutions

The overall Policy and Institutional Index (PII) developed in this study aggregates the four indices into a single unique index that measures the optimal mix of quality of policies pursued and institutional arrangements. The PII is decomposed into the four components to estimate the relative contribution of each component to the overall policy and institutional mix (Table 10.1). The results show that, over

the last two decades, economic and public sector management, and policies for social inclusion and equity were playing the leading role in determining policies and institutional arrangements in the country. Structural policies related to trade, financial sector, and business regulatory environment were given the least focus in the policy space.

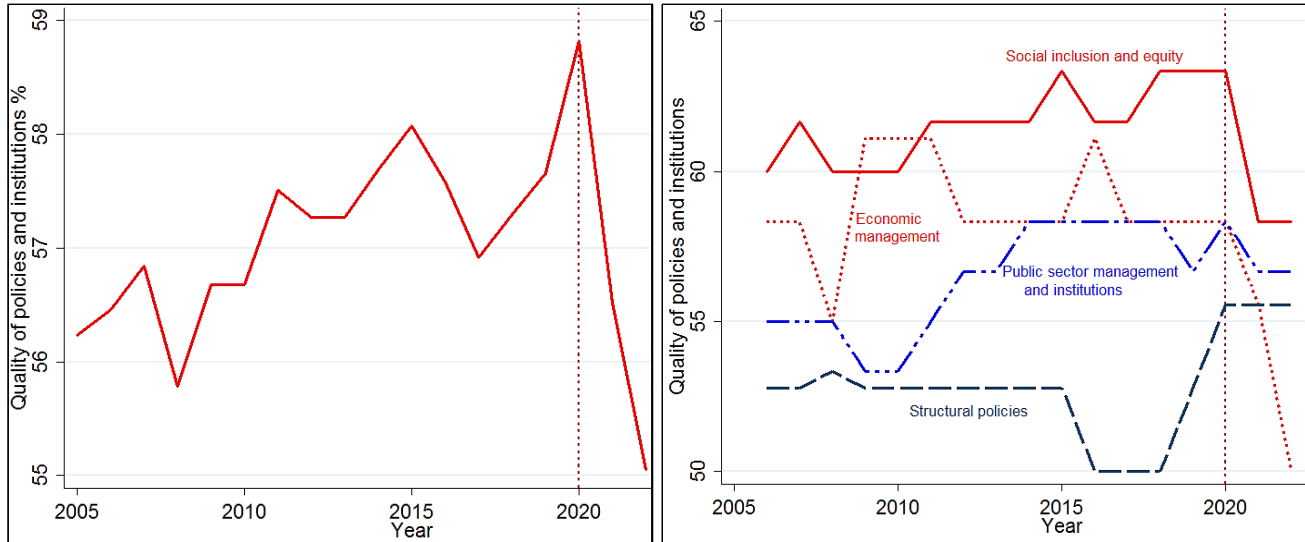
Table 10.1: Relative contribution of policies and institutional arrangements

Components of policy and institutional quality	Relative contribution (%)
Public sector management and institutions	32.7
Economic management	30.9
Policies for social inclusion and equity	30.8
Structural policies	5.7
Residuals	-0.2

Source: Computed from data in the World Bank (2005-2022)

Ethiopia has experienced an adverse policy environment since 2020 (Figure 10.1). All the four components of the policy and institutional mix have shown drastic fall, particularly since 2020 (left panel of Figure 10.1). Economic management policy was the worst policy management failure recorded in the two decades period (right panel of the figure). The state of economic management reached to the poorest level as a reflection of imprudent macroeconomic management, fiscal policy, and debt policy since 2020. This policy imprudence is expected to be reinforced with the domestic conflicts and political instabilities widely prevailed since 2020.

Figure 10.1: The dynamics of policies and institutional quality in Ethiopia



Source: Computed from data in the World Bank (2005-2022)

Development policies of a country are expected to be internally consistent so that the courses of action will be compatible and uniform among stakeholders at different levels. If policy consistency is maintained, the courses of action will be correctly and efficiently followed by all the stakeholders without creating a conflict. Internal consistency of policies ensures that different policies are balanced and reconciled within the general development plan so that no policy conflicts can exist between the components.

The four development and governance policies pursued in Ethiopia over the last two decades were evaluated for internal consistency. The pairwise correlation between them was found to be either insignificant or negative (Table 10.2). Economic management policies and structural policies pursued were conflicting, suggesting that macroeconomic, fiscal, and debt policies were contradicting policies for trade, financial sector, and business regulatory environment.

Table 10.2: Policies in Ethiopia are inconsistent or independent

Policies	Economic management policy	Public sector management and institutions	Policies for social inclusion and equity	Structural policies
Economic management policy	1			
Public sector management and institutions	-0.285	1		
Policies for social inclusion and equity	0.384	0.531**	1	
Structural policies	-0.526**	-0.172	-0.427*	1

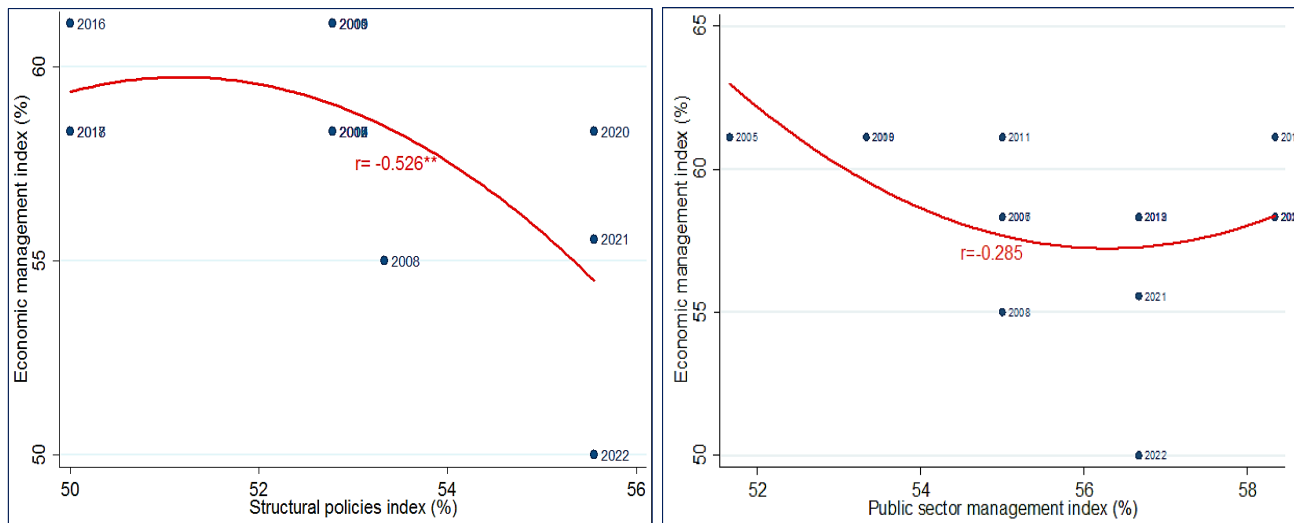
Source: Computed from data in the World Bank (2005-2022)

By the same token, policies pursued to ensure equity and social inclusion significantly contradict policies for public sector management and institutions. This policy inconsistency reveals that policies pursued to realize equity of public resource use, development of human resource, gender equality, and policies and institutions for environmental sustainability were against policies for ensuring property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, as well as policies for transparency, accountability, and public sector corruption. Moreover, policies for social inclusion and equity significantly contradict structural policies.

The results generally show that the overall development plan derived from such policies is neither balanced nor reconciled towards achieving the policy objectives implemented by different stakeholders operating at different levels and sectors. Internally inconsistent policies are expected to have several consequences, including unexpected or negative policy outcomes.

The dynamic link between human welfare and policies and institutions also shows absence of interdependence between them (Figure 10.2). Structural policies pursued in Ethiopia over the years shows their inverse dynamic link with economic management. This signifies that macroeconomic management, fiscal policy, and debt policy were contradictory with trade, financial sector, and the business regulatory environment. Moreover, economic management policies and public sector management and institutions were independently made and implemented without considering the welfare implications of one on the other (right panel of the figure). Consequently, poor quality of policies and institutional arrangements, and lack of alignment among them are expected to have caused huge welfare losses.

Figure 10.2: Policies in Ethiopia were either contradictory or independent

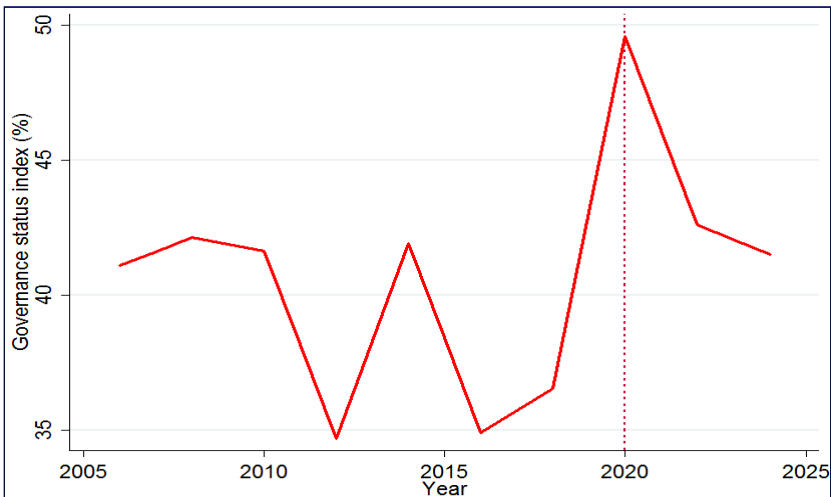


Source: Computed from data in the World Bank (2005-2022)

10.5. Governance Status

The governance status of nations is largely determined by their level of governance difficulty and governance performance. Governance performance is measured by steering capability, resource efficiency, consensus building, and international cooperation. The status of governance in Ethiopia over the last two decades was weak and inconsistent (Figure 10.3). In 2024, Ethiopia was ranked 88th (out of 138 developing and transition economies). After the coming of the incumbent regime into power in 2018, governance was rapidly improved for a couple of years until 2020. However, after 2020, governance in Ethiopia has been rapidly deteriorating mainly due to domestic conflicts and political violence widely prevailing in the country.

Figure 10.3: Governance in Ethiopia rapidly deteriorating since 2020

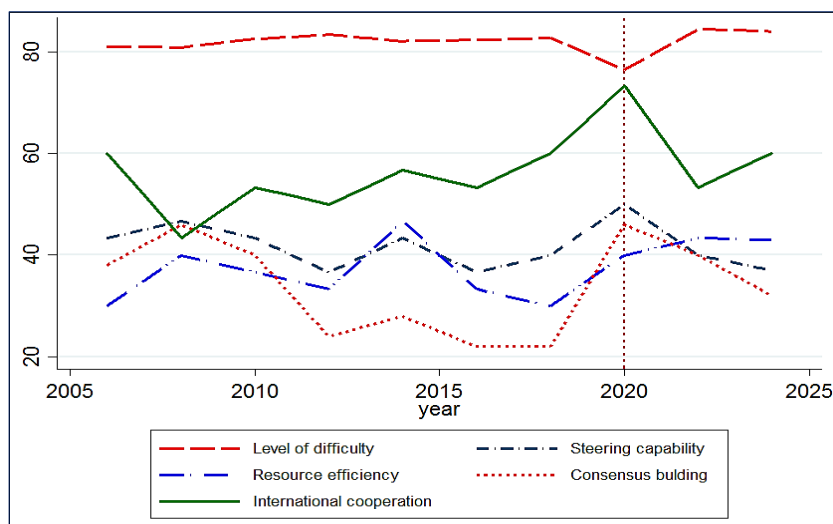


Source: Computed from data in Bertelsmann Stiftung (2006-2024)

The trends in the determinants of governance over the period show substantial imprudence in political leadership after 2020. Except for governance difficulty, the other five components of governance were

deteriorating since 2020 (Figure 10.4). Due to flawed performance of the political leadership, governance difficulty started to rise after 2020. Over the years, the political leadership was relatively better in international cooperation until it deteriorated after 2020. On the other hand, governance was evaluated to be weak in the efficient use of resources, steering capability, and consensus-building.

Figure 10.4: Determinants of governance deteriorating since 2020

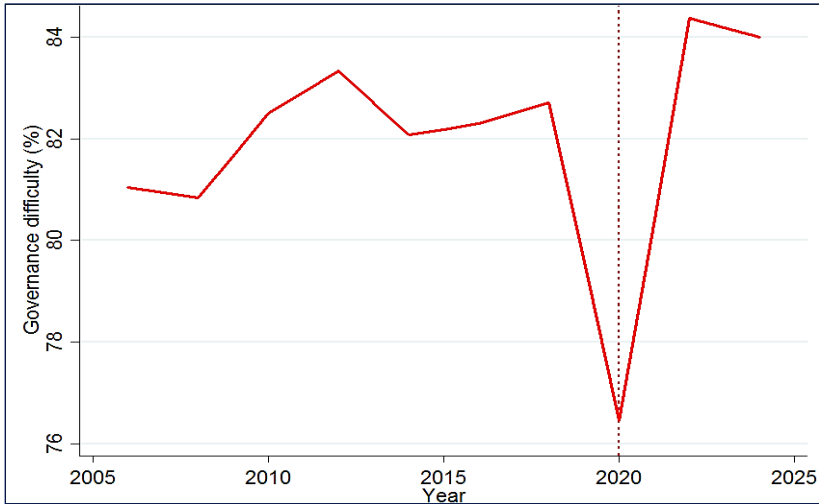


Source: Computed from data in Bertelsmann Stiftung (2006-2024)

The level of governance difficulty prevailed in a country adversely affects the governance performance of the government. The level of governance difficulty in Ethiopia was labeled to be substantial with unpredictable trends over the last two decades (Figure 10.5). Despite the improvement realized during the incumbent regime until 2020, governance difficulty increased from 52.3% in 2020 to 84% in 2023. The drastic rise in governance difficulty is expected to be strongly driven by the domestic conflicts and political instabilities and the associated conflict management system practiced by the political

leadership. Governance in Ethiopia has been strongly challenging due the increasingly high governance difficulty experienced in recent years.

Figure 10.5: Dynamics of governance difficulty in Ethiopia



Source: Computed from data in Bertelsmann Stiftung (2006-2024)

The level of governance difficulty can be measured by three factors: structural constraints, conflict intensity, and civil society traditions (BS, 2024). The sources of the substantial and unpredictable governance difficulty in Ethiopia over the last two decades was mainly attributable to domestic conflicts and political violence (54%) followed by civil society traditions (23.1%), and structural constraints (19.1%) (Table 10.3). The decomposition results clearly signify that governance difficulty in Ethiopia was predominantly related to domestic conflicts arising from political disputes on the quest for political power or economic, political, and human rights that may be addressed by political solutions.

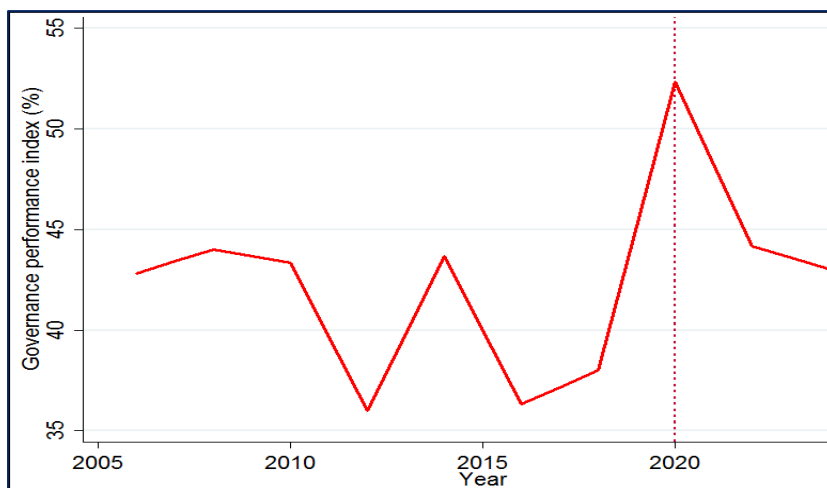
Table 10.3: Components of governance difficulty in Ethiopia

Components of governance difficulty	Relative contribution (%)
Conflict intensity	54.0
Civil society traditions	23.1
Structural constraints	19.1
Residuals	3.8

Source: Computed from data in Bertelsmann Stiftung (2006-2024)

10.6. Governance Performance

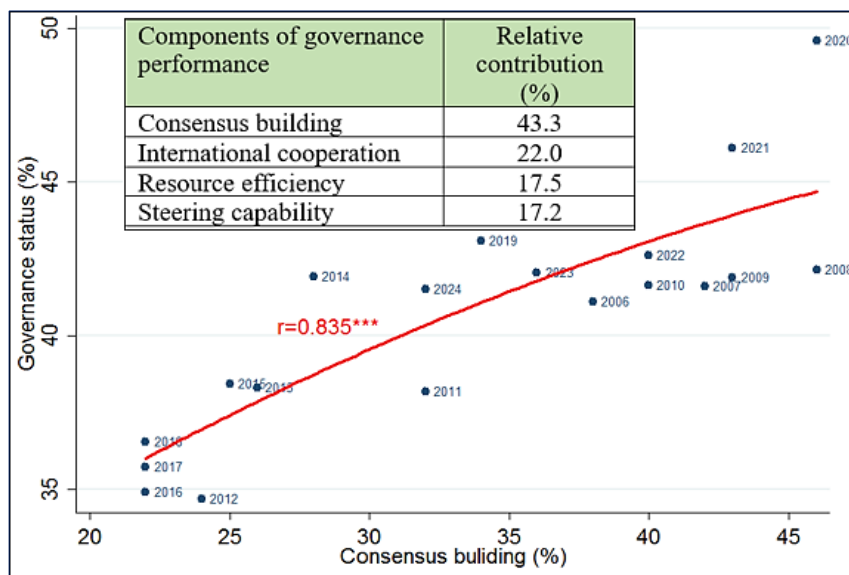
The political leadership in Ethiopia tried to improve its governance performance until 2020 (Figure 10.6). However, this positive trend was reversed after 2020 when the political leadership was strongly challenged by domestic conflicts and political instabilities. In 2024, the governance performance of the political leadership was labeled as flawed with fundamental weaknesses and imperfections.

Figure 10.6: Pattern of governance performance in Ethiopia

Source: Computed from data in Bertelsmann Stiftung (2006-2024)

The governance performance of political leadership can be measured by four factors: steering capability, resource efficiency, consensus building, and international cooperation (BS, 2024). The governance performance of the political leadership in Ethiopia over the last two decades was largely attributable to consensus building (43.3%) followed by international cooperation (22%), resource efficiency (17.5%), and steering capability (17.2%) (Figure 10.7). Consensus building was the major factor largely affecting the governance performance of the political leadership in Ethiopia. Over the last two decades, governance in Ethiopia was strongly and directly associated with consensus building. To ensure good governance, the political leadership is expected to reach consensus on the factors affecting it, including national goals, anti-democratic actors, cleavage or conflict management, public consultation, and reconciliation. The state of consensus building of the political leadership has been significantly deteriorating in recent years. This has aggravated the weak governance arising from poor leadership quality that is not able to establish consensus on major governance issues.

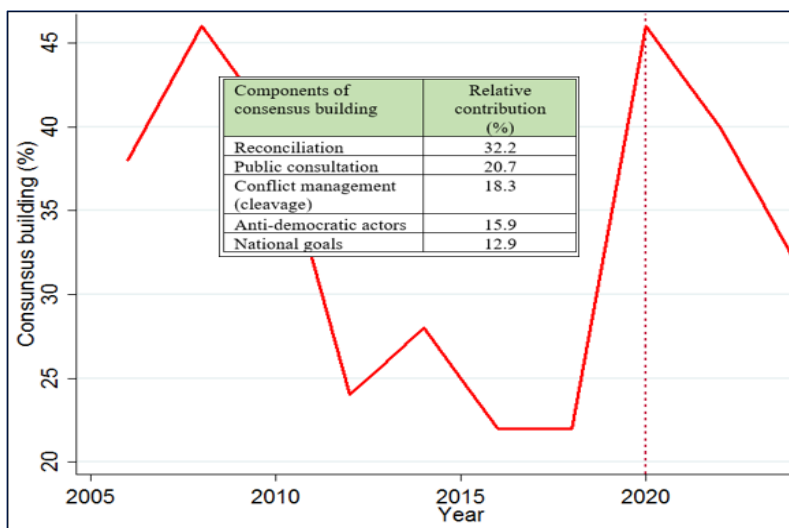
Figure 10.7: Governance in Ethiopia strongly associated with consensus building



Source: Computed from data in Bertelsmann Stiftung (2006-2024)

Consensus building includes common understanding on five governance variables: national goals, anti-democratic actors, cleavage or conflict management, public consultation, and reconciliation (BS, 2024). Consensus building in Ethiopia was rapidly falling since 2020 (Figure 10.8). These factors determining consensus building over the last two decades were quite important; reconciliation (32.2%), public consultation or civil participation (20.7%), and conflict management (18.3%) being the top three factors.

Figure 10.8: Consensus building in Ethiopia rapidly falling since 2020



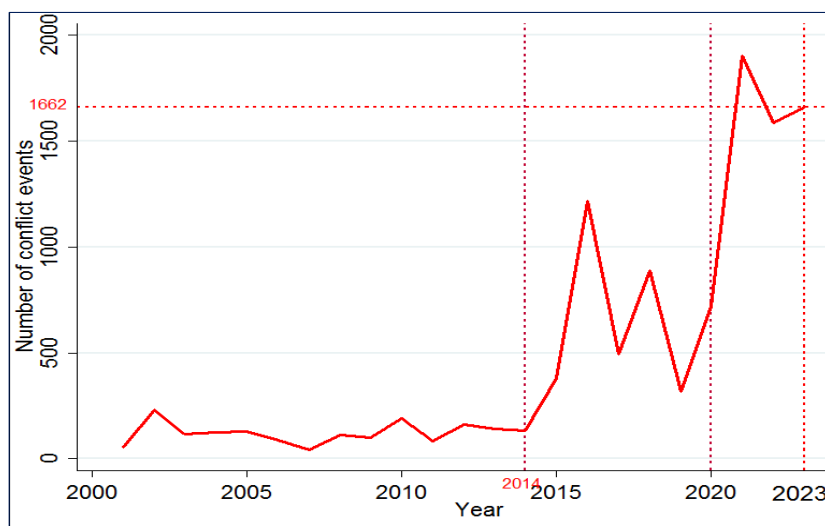
Source: Computed from data in Bertelsmann Stiftung (2006-2024)

10.7. Domestic Conflicts

In countries like Ethiopia, characterized by very high diversity of groups, communities and populations, conflicts and opposing interests are expected. In Ethiopia, there have been only 54 conflict events with 890 fatalities recorded in 2001. This level of conflict events was common until 2014 when domestic conflicts and political violence protesting for regime change erupted throughout the country. After the regime change in 2018, conflicts and political violence were reduced until 2020 when the conflict in the northern part of the country erupted. It is after 2014 that domestic conflicts and political violence in Ethiopia were rapidly increasing (Figure 10.9). In 2023 alone, 1,662 conflict events with 3863 fatalities were reported.

These disorders can be categorized into three groups: political violence, strategic developments, and demonstrations. Around 88 percent of the conflict events were related to political violence that prevailed throughout the country. Strategic development (11.6%) such as training, establishment of military base, recruitment of armed forces (military/ special/ militia forces at regional and federal levels), purchase of armaments, signing of agreements; and demonstrations (10.5%) were the other two forms of disorders widely occurring in Ethiopia.

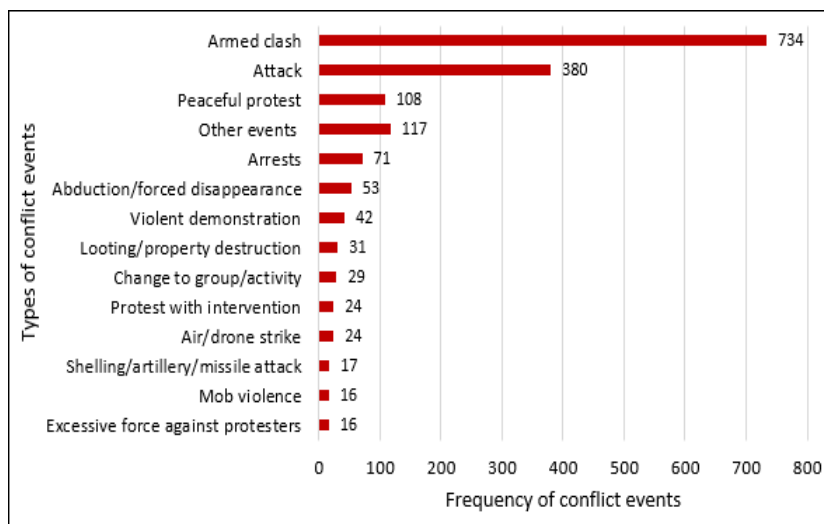
Figure 10.9: Growth of conflict events in Ethiopia



Source: Computed from data in Bertelsmann Stiftung (2006-2024)

Many conflict events, including abduction or forced disappearance, looting or destruction, air or drone strikes, missile attacks, violent demonstrations, and the use of excessive force against protestors were some indicators of the extent to which peace and security were deteriorated and rule of law denied (Figure 10.10). Armed clashes and attacks were the top two conflict events in 2023.

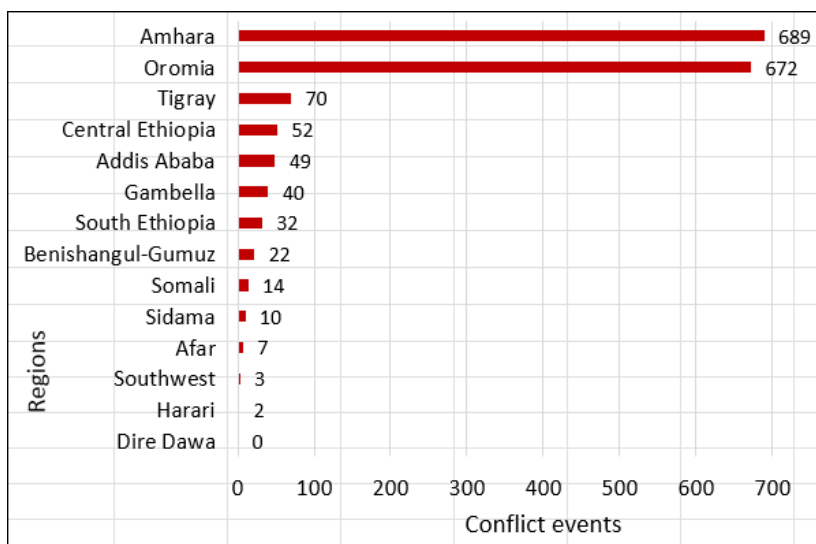
Figure 10.10: Types of conflict events in Ethiopia (2023)



Source: Source: Computed from data in ACLED (2001-2023)

The regional distribution of domestic conflicts and political violence in Ethiopia reveals the major regional states adversely affected by the conflict (Figure 10.11). In 2023, the top three regional states where domestic conflicts and political violence widely spread were Amhara, Oroma, and Tigray, respectively with 689, 672, and 70 conflict events. It is imperative to conclude that these conflicts have severely affected the socioeconomic progress and day-to-day activities of citizens at all levels.

Figure 10.11: Regional distribution of conflict events in Ethiopia (2023)

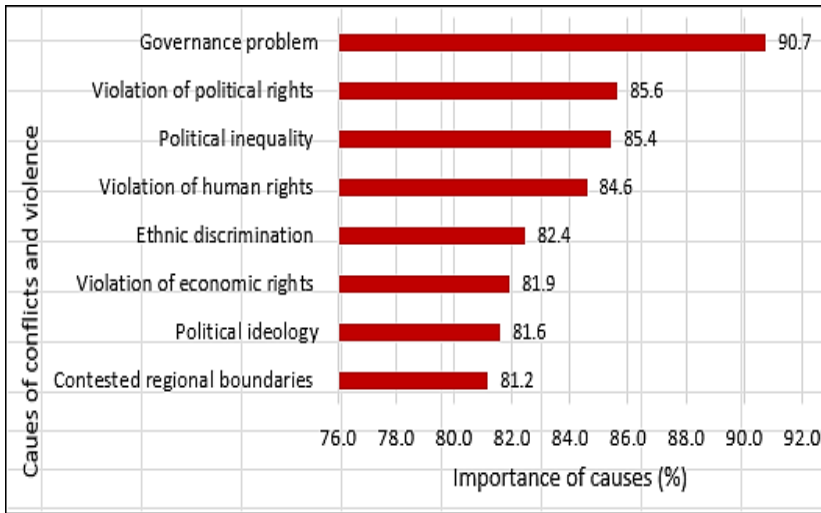


Source: Computed from data in ACLED (2023)

10.8. Causes and Drivers of Conflicts

The perceived and revealed causes of domestic conflicts and political violence in Ethiopia were assessed using primary and secondary data. The expert survey conducted on 310 members of the EEA identified the top eight fundamental causes of conflicts and political violence in Ethiopia (Figure 10.12). All the perceived causes are supposed to be relevant causes with over 80 percent index of importance. The top four perceived causes of conflicts and political violence were identified to be bad governance, violation of political and human rights, and political inequality. Ethnic discrimination, violation of economic rights, difference in political ideology, and contested regional boundaries were the other four important causes evaluated by the experts.

Figure 10.12: Perceived causes of domestic conflicts and political instability in Ethiopia



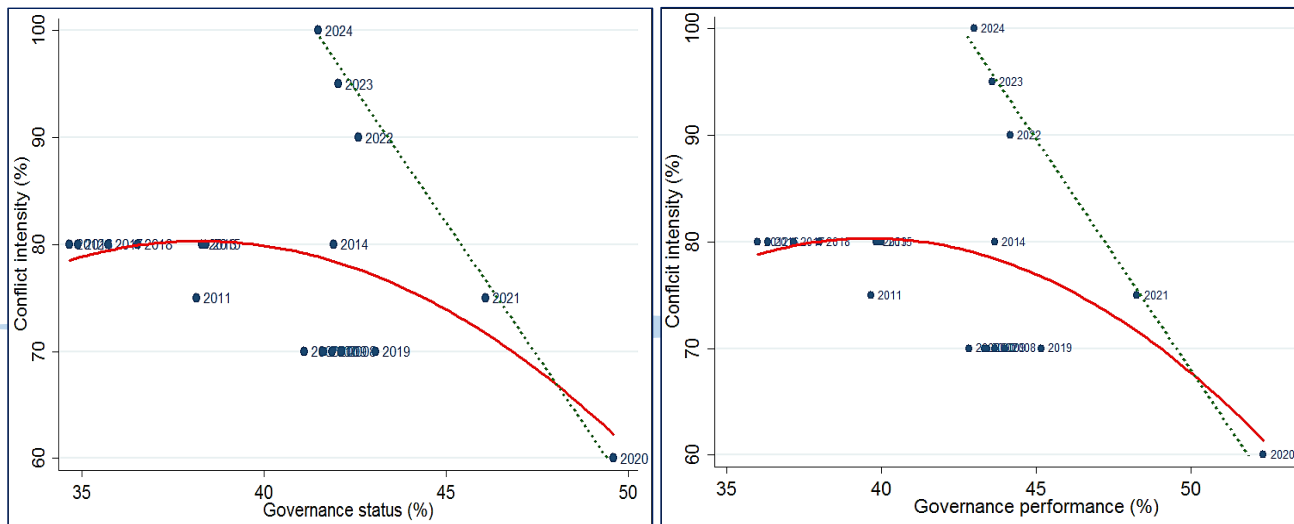
Note: The causes are sorted by their importance index above 80%.

Source: Computed from EEA expert survey data (2024)

In addition to the perceived causes evaluated by the experts, the revealed causes and drivers of conflicts and political violence were identified using secondary data. Since 2020, governance and intensity of domestic conflicts in Ethiopia have been strongly and inversely associated (left panel of Figure 10.13). Domestic conflicts increasingly prevailed with bad governance experienced since 2020. It is imperative to conclude that bad governance and intensity of conflicts were complementary factors, causing considerable socioeconomic crisis over the last four years (2020-2024) (see broken line connecting the years in the figure).

Governance performance of the political leadership in Ethiopia was also adversely affected by domestic conflicts in the last two decades (right panel of the figure). Unlike the longrun trend, however, governance performance was increasingly flawed with rising conflicts since 2020 (see broken line connecting the years in the figure).

Figure 10.13: Weak governance and flawed performance with rising conflicts since 2020



Source: Computed from data in Bertelsmann Stiftung (2006-2024)

10.9. Socioeconomic Impacts of Conflicts

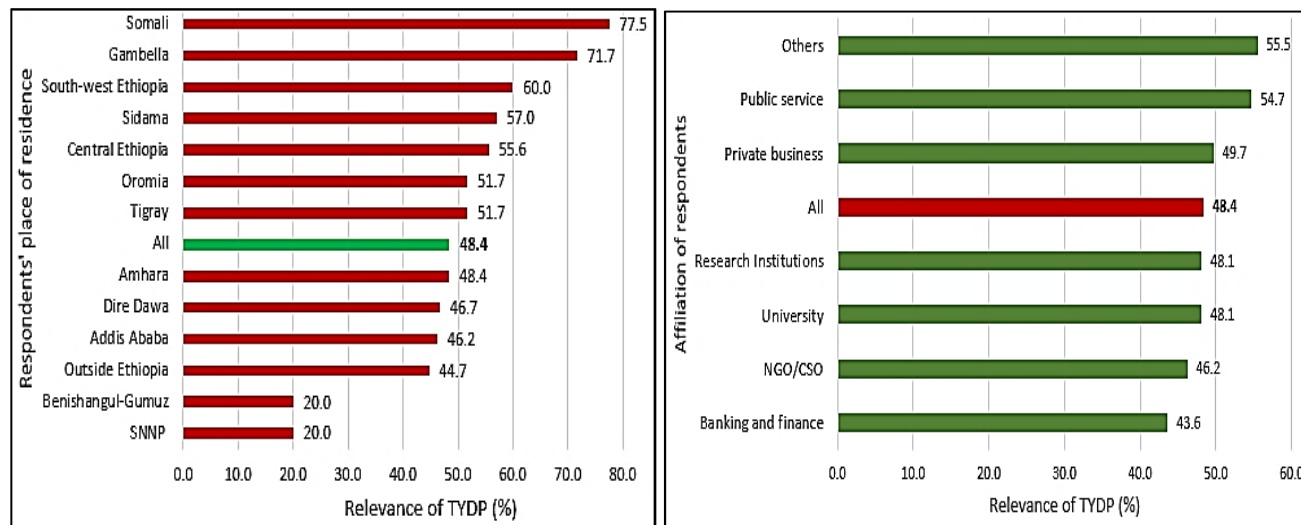
Both primary and secondary data were utilized to assess the perceived and revealed socioeconomic impacts of domestic conflicts and political violence in Ethiopia.

10.9.1. *Perceived impacts*

There is a common assertion that the Ten-Year Development Plan (TYDP) has become irrelevant due to domestic conflicts and political instability widely prevailing since 2020. Based on this assertion, the government of Ethiopia seems convinced to revise the plan. The expert survey conducted on 310 EEA members around the world has verified this assertion. Though responses vary by place of residence and affiliation or occupation of the respondents, the overall relevance of the TYDP (2021-2030) by January 2024 was perceived to be 48.4% (left panel of Figure 10.14). The TYDP has lost 51.6 percent of its relevance (right panel of the figure).

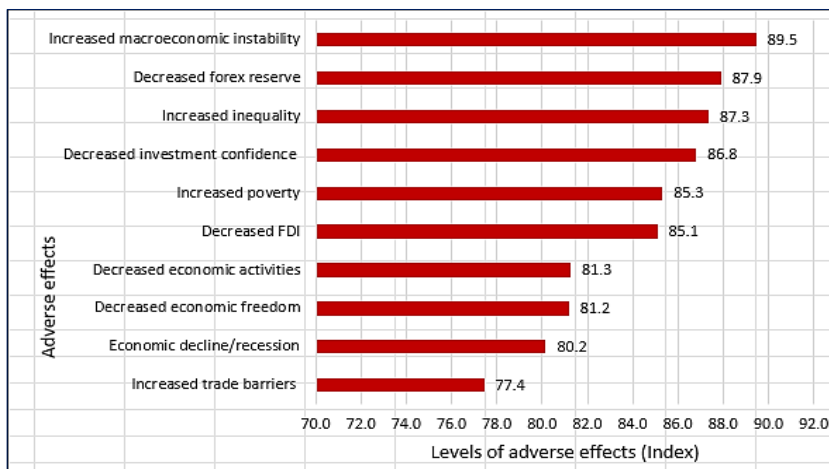
Experts from SNNP, Gambella, Addis Ababa, Dire Dawa, Amhara regions and the diaspora, perceive that relevance of the TYDP is even below 48.4%. Experts working in banking and finance, NGOs/CSOs, universities, and research institutions have similar perceptions. The domestic conflicts and political instabilities have severely affected the TYDP since the start of its implementation.

Figure 10.14: Perceived relevance of the TYDP by January 2024



The expert survey of EEA members around the world has also been utilized to identify the perceived adverse socioeconomic impacts (Figure 10.15). The experts have identified 10 most important adverse effects of the conflicts on the Ethiopian economy. The top five adverse effects are increased macroeconomic instability, deteriorating foreign reserves, inequality, eroded investment confidence, and rising poverty. The rest perceived adverse effects were also most relevant and verified by other sources of data. The Ethiopian economy is experiencing several adversities, including contracting FDI, and slowed economic growth arising from contracting economic activities, violation of economic rights related to conflicts, economic overall decline arising from the contractionary process, and increased trade barriers.

Figure 10.15: Perceived adverse effects of domestic conflicts and political instability in Ethiopia

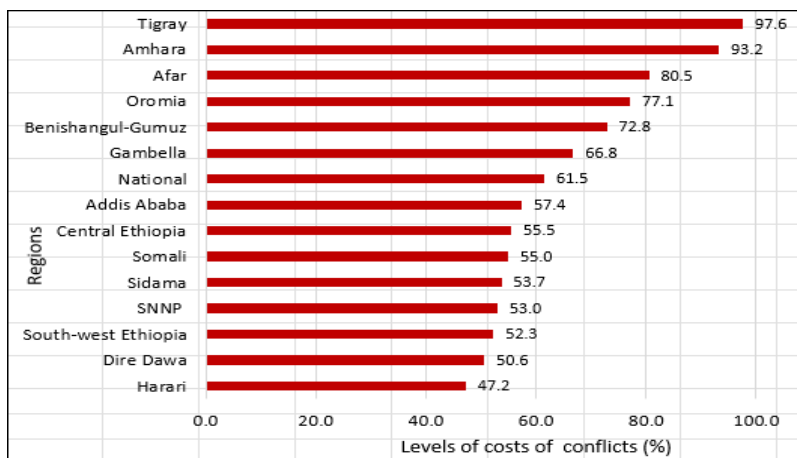


Source: Computed from EEA expert survey data (2024)

The expert survey was also used to identify the relative adverse effects of the conflicts and political instabilities on regional states of Ethiopia (Figure 10.16). The top four regional states perceived as most adversely

affected were Tigray, Amhara, Afar, and Oromia. This evidence is consistent with the revealed impacts evaluated by using secondary data.

Figure 10.16: Perceived costs of domestic conflicts on regional states of Ethiopia



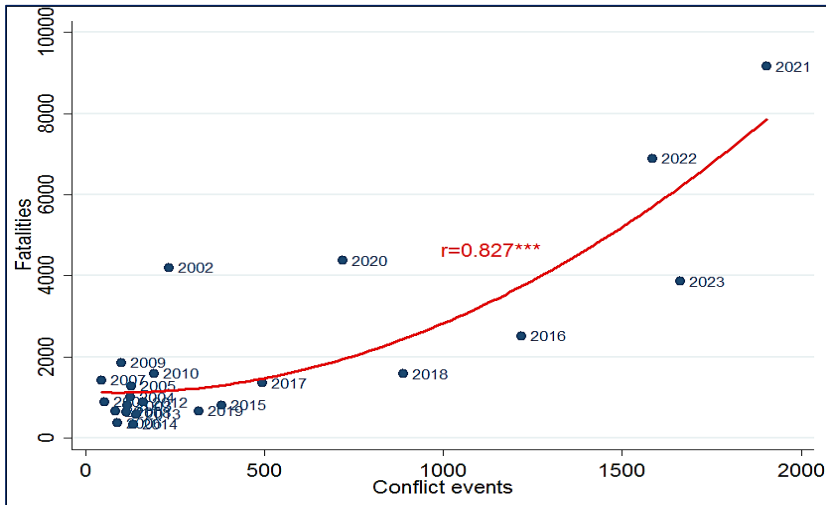
Source: Computed from EEA expert survey data (2024)

10.9.2. Revealed impacts

The revealed socioeconomic costs of domestic conflicts and political violence in Ethiopia are multidimensional. The major impacts verified in this study include impacts on fatality, aggregate demand, domestic debt outstanding, unemployment, and investment environment.

The domestic conflicts and political violence in Ethiopia have caused huge and increasing fatalities (Figure 10.17). In addition to the costs of internal displacements nationwide, thousands of citizens have lost their lives for several years.

Figure 10.17: Conflict events in Ethiopia are very fatal



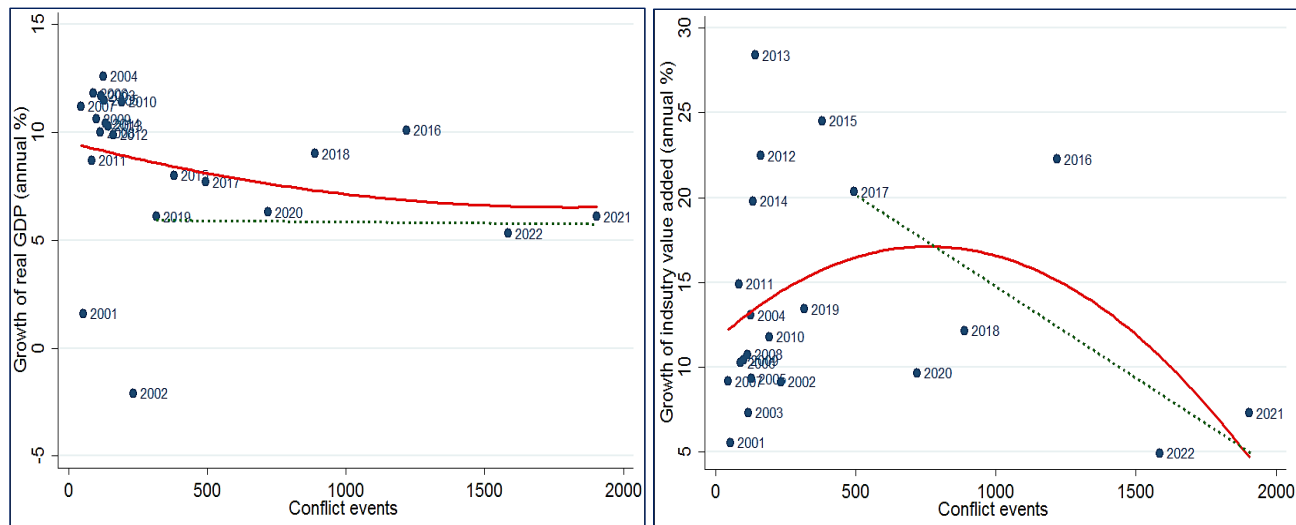
Source: Computed from data in ACLED (2001-2023)

Domestic conflicts have stagnated and slowed growth of aggregate output (left panel of Figure 10.18). They are the primary factors adversely affecting the production and supply of goods and services. Growth of real GDP was particularly stagnated with the increasing conflicts and political instabilities over the last four years (2019-2022). During this period, the annual growth rate of real GDP was stagnant³³ and fluctuating between 5.3% and 6.1% with rising conflict events from 817 in 2019 to 1662 in 2023.

The industrial sector was particularly strongly affected by conflicts widely prevailing since 2017 (right panel of the figure). The growth of industrial GDP was decreasing over the last six years (2017-2022). Annual growth of industrial GDP decreased from 20.3% in 2017 to 4.9% in 2022, indicating the stagnation of the industrial sector.

³³ Economic stagnation refers to a situation in which the economy stays the same and does not grow and develop. Stagnation is a prolonged period of little or no growth, not just zero or below zero, in an economy often highlighted by periods of high unemployment. An annual GDP growth rate less than 2-3% is considered stagnation.

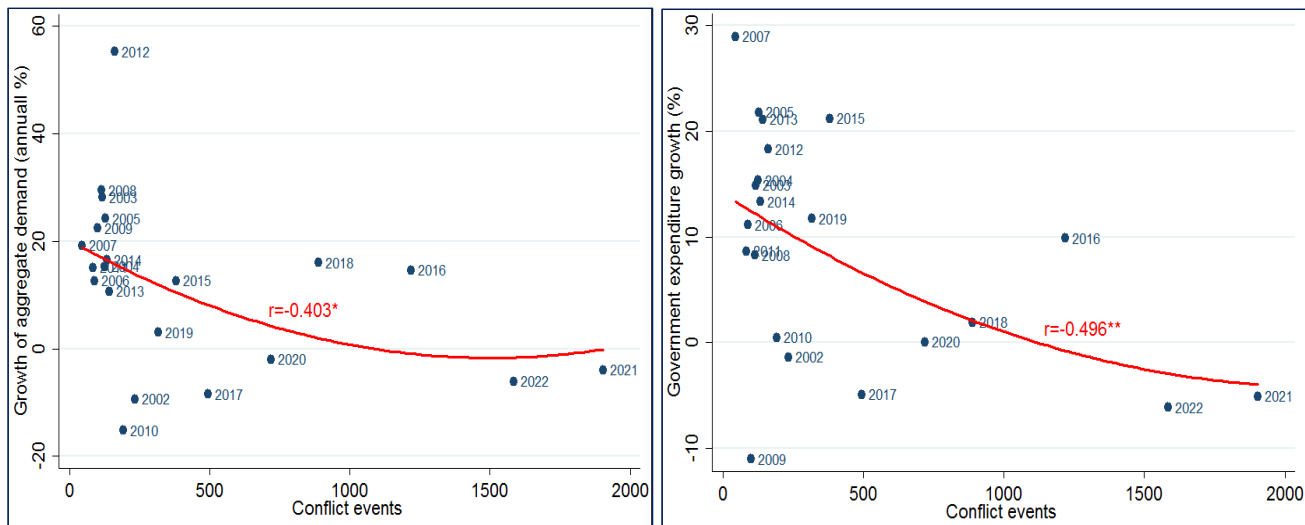
Figure 10.18: Output growth stagnated with rising conflicts since 2019



Source: Computed from data in NBE and ACLED (2001-2023)

Conflicts and political unrest adversely affect distribution, marketing, and consumption of goods and services and the operation of markets and marketing actors (producers, middlemen, processors, and consumers). Domestic conflicts and political violence have adversely affected growth of aggregate demand (left panel of Figure 10.19). Unlike the previous years, annual growth of aggregate demand substantially decreased with increasing incidence of conflicts. This is mainly attributed to the excessive fall in government expenditure observed in recent years (right panel of the figure).

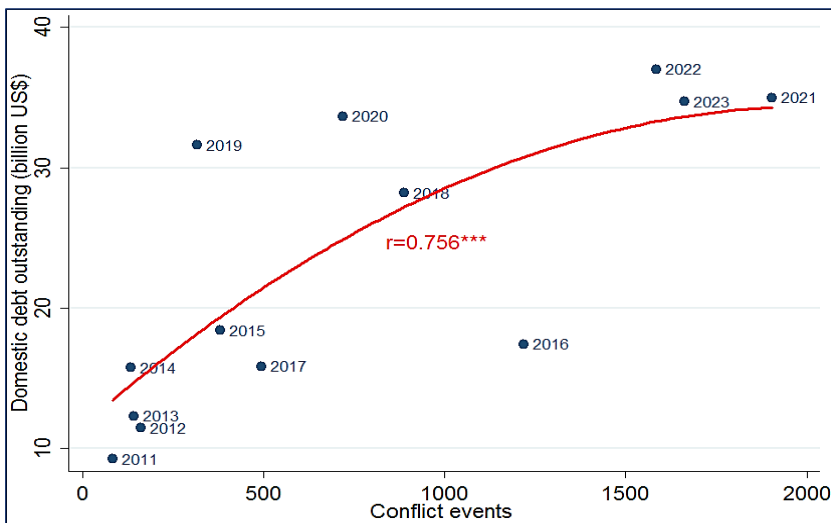
Figure 10.19: Growth of aggregate demand falling with rising conflicts



Source: Computed from data in the NBE and ACLED (2001-2023)

Governments allocate funds for managing domestic conflicts and political violence, which force them to look for domestic sources of finance, including domestic debt. Domestic debt outstanding in Ethiopia was strongly associated with domestic conflicts and political violence (Figure 10.20). The rising domestic debt with rising conflicts is expected to have other consequences, including macroeconomic instability and inflation, shortage of credit for the private sector, and implementation of imprudent debt and fiscal policies.

Figure 10.20: Domestic debt rising with conflicts and political violence



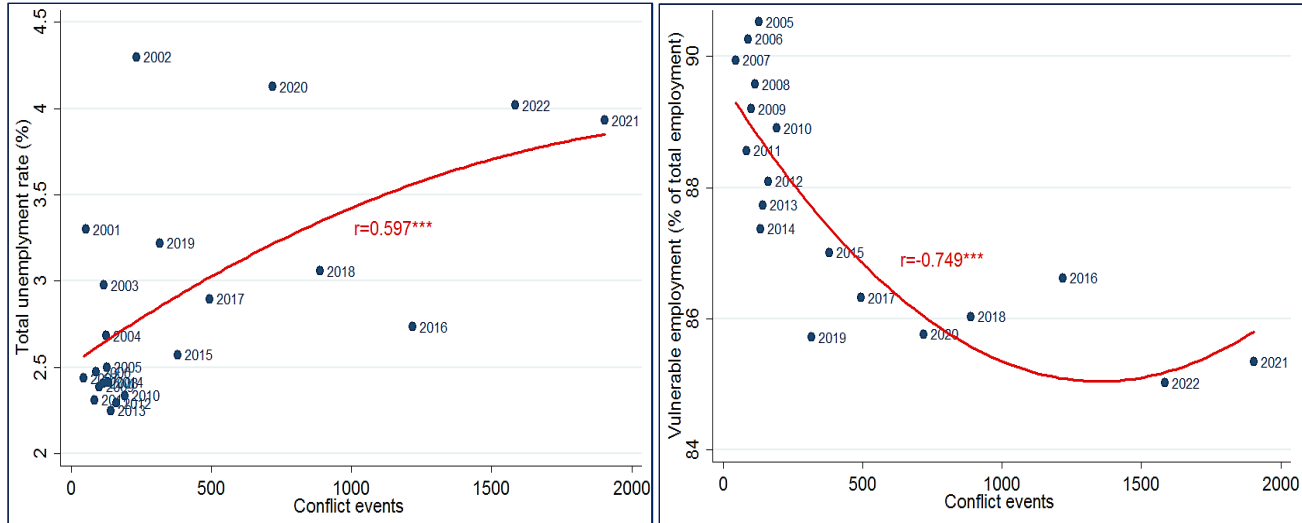
Source: Computed from data in the MoF and ACLED (2011-2022)

Unemployment is the other adverse effect of domestic conflicts and political violence in Ethiopia (Figure 10.21). Total unemployment considerably increased due to conflicts and violence (left panel of

figure). Vulnerable employment³⁴ was particularly rapidly falling with increasing conflicts (right panel of the figure). When there are conflicts, vulnerable employment is terminated with displacements and the fall in the demand for their goods and services. The demand for their products dropped mainly because production and market operations were terminated or stagnated.

³⁴ Vulnerable employment is contributing family workers and own-account workers (known as self-employed) as a percentage of total employment. Own-account workers are workers who (working on their own account or with one or more partners) hold the types of jobs defined as "self-employment jobs" and have not engaged on a continuous basis any employees to work for them (World Bank, 2024).

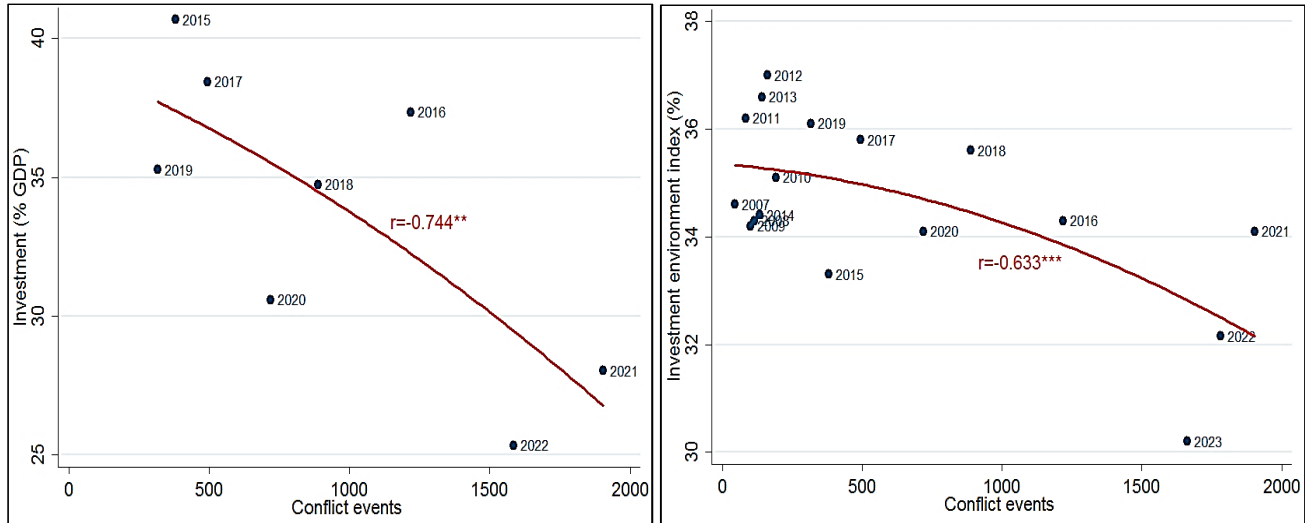
Figure 10.21: Total unemployment rising with conflicts and political violence



Source: Computed from data in ACLED and the World Bank (2001-2023)

Protection and availability of investment is strongly associated with peace and security, rule of law, property rights, investor protection, financing ecosystem, enforcement of contracts, and restrictions on international investment or FDI (LI, 2023). Investment (% of GDP) in Ethiopia was rapidly contracting with increasing conflicts (left panel of Figure 10.22). Adequate protection and access to investments in Ethiopia was also deteriorated (right panel of the figure). The deteriorating investment environment has led to contraction of both domestic and international investments.

Figure 10.22: Investments deteriorating with rising conflicts



Source: Computed from data in the World Bank, LI and ACLED (2007-2023).

10.10. Concluding Remarks

Ethiopia has experienced an adverse policy environment since 2020. The quality of all development policies and institutional arrangements has rapidly deteriorated since 2020. The failure in economic management policy was particularly serious. Policies in Ethiopia are also either inconsistent or independent. The increasing imprudence of policies reinforced with the domestic conflicts and political instabilities has adversely affected the formulation and implementation of prudent development policies in Ethiopia.

Weak governance has been worsening since 2020. All the factors of governance have been deteriorating since 2020. Consequently, the level of governance difficulty in Ethiopia was labeled to be substantial with unpredictable trends. Governance difficulty substantially increased after 2020. Governance difficulty in Ethiopia was predominantly related to domestic conflicts arising from political disputes. In 2024, the governance performance of the political leadership was labeled as flawed. Though consensus building is the primary factor of governance in Ethiopia, it has been drastically eroded since 2020.

In 2023, the top three regional states most affected by the domestic conflicts and political violence are identified to be Amhara, Oromia, and Tigray. The conflicts have severely affected the socioeconomic progress of citizens at all levels. There were eight fundamental causes of conflicts and political violence in Ethiopia. These were bad governance, violation of political and human rights, political inequality, ethnic discrimination, violation of economic rights, difference in political ideology, and contested regional boundaries.

Conflicts and political instabilities in Ethiopia have resulted in several socioeconomic impacts. Experts perceive that the TYDP has lost its relevance due to the conflicts. Weak governance and flawed

performance were significantly associated with the increasing conflicts. There are 10 most important adverse effects of the conflicts on the Ethiopian economy as perceived by the experts. The top five adverse effects are increased macroeconomic instability, deteriorating foreign reserves, inequality, eroded investment confidence, and rising poverty. The Ethiopian economy is also experiencing several other adversities, including contracting FDI, and slowed economic growth arising from contracting economic activities, violation of economic rights related to conflicts, economic overall decline arising from the contractionary process, and increased trade barriers. The four regional states perceived as most adversely affected by the conflicts are Tigray, Amhara, Afar, and Oromia.

Domestic conflicts were also investigated for their revealed adverse effects. Above all, the conflicts were very fatal. The increasing and widespread conflicts have resulted in stagnated output growth, falling growth of aggregate demand, rising domestic debt outstanding and total unemployment, and decreasing vulnerable employment. Investments and security of the investment environment have been deteriorating with rising conflicts.

Policy formulation and implementation, socioeconomic progress, and governance are severely affected by domestic conflicts and political instabilities. The problem requires multidimensional policies and reform measures involving all the primary actors. The government and primary actors of the conflicts and political violence should be committed to peace deals aimed at restoring peace, and rule of law required for realization of development aspirations of the country.

The four regional states most adversely affected by the conflict cover around 67% of the Ethiopian population. Revision of the TYDP and preparation of a new medium-term development plan should duly consider the socioeconomic losses regional states have faced. The revised development plan should include rehabilitation, reconstruction, and reinstitution (3R) of the most affected regional states.

References

- ACLED (Armed Conflicts Location and Event Data). (2023). Ethiopia Peace Observatory, available at <https://epo.acleddata.com/>
- BT (Bertelsmann Stiftung). (2022). Codebook for Country Assessments, Bertelsmann Transformation Index (BTI), available at https://bti-project.org/fileadmin/api/content/en/downloads/codebooks/BTI2022_Codebook.pdf
- Legatum Institute. (2023). Legatum Prosperity Index, available at <https://li.com/reports/2023-legatum-prosperity-index/#>
- MoF (Ministry of Finance) of the FDRE. (2022). Public Sector Debt Statistical Bulletin (various issues), available at <https://www.mofed.gov.et/resources/bulletin/>
- NBE (National Bank of Ethiopia). (2022). Annual Bulletin 2021/22, Addis Ababa, Ethiopia.
- World Bank. (2024). World Development Indicators. Available at <https://databank.worldbank.org/source/world-development-indicators>