

REPORT ON THE ETHIOPIAN ECONOMY

2014

*Small and Micro Enterprises (SMEs)
Development in Ethiopia: Policies,
Performance, Constraints and
Prospects*

**Ethiopian Economics Association
(EEA)**

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Foreword

Assisting the economic policy formulation and implementation capabilities of Ethiopia through rigorous economic research is one of the core objectives of the Ethiopian Economics Association. In its effort to realize this objective, the Association has been publishing an independent Report on the Ethiopian economy every year since 2000. The Association is happy to issue the eleventh edition of this Report, which, as before, attempts to evaluate the yearly performance of the Ethiopian economy both on aggregate and its sectoral components. It is intended to inform and stimulate dialogue on topical economic issues - an important contribution towards releasing Ethiopia's growth potential.

Following the formats of the previous years' reports the current report has also got two parts. Part one focuses on a broader review of the macroeconomic situation and the performance of the economy at the sectoral levels. This part of the report provides an update of recent economic trends and covers the macroeconomic performance as well as selected sector performance and policy issues. The report concludes by appreciating the recent encouraging growth trends, but also cautions against complacency. The special topic of this year's report is *Small and Micro Enterprises (SMEs) in Ethiopia Strategy, Performance, Constraints and Prospects*, a sector with significant contribution to national development. The publication comes at a timely moment and provides a valuable contribution to the understanding of the performance of the SMEs, the economic concerns and the challenges it is facing as well as the policy implications.

The SMEs is described as the natural home of entrepreneurship. It has the potential to provide the ideal environment for enabling entrepreneurs to optimally exercise their talents and to attain their personal and professional goals. In all successful economies, SMEs have been the natural springboard for growth, job creation and social progress. The labor absorptive capacity of the small

business sector is high and the average capital cost per job created is usually lower than in a big business. Historical evidence shows that most businesses in Ethiopia started from small/micro informal level and grew over time. The small business sector is also seen as an important force as it leads to more equitable income distribution, exploitation of niche markets, enhanced productivity and technical change and, through a combination of all of these measures stimulate economic development.

The SME sector has also been instrumental in bringing about economic transition by providing goods and services having adequate quality and reasonable prices to a large number of people particularly in rural areas, and by effectively using the skills and talents of a large number of people without requiring high-level training, large sums of capital or sophisticated technology.

I believe that the report will be useful to policymakers, legislators and other stakeholders as they work to create an enabling environment to realize the national development goals. I hope that subsequent annual reports will become valuable contributions to the understanding of the many economic development challenges that face the nation.

Finally, I would like to express my appreciation to all those people whose contribution has made this Report possible.

Alemayehu Seyoum Taffesse (DPhil)



President
Ethiopian Economics Association

Acknowledgement

The preparation of this report owes much to the hard work, dedication, advice, contributions and support of many people and organizations. The Ethiopian Economic Association (EEA) would like to extend its appreciation to all of them. The overall work has been led by Dr. Assefa Admassie, who is the Principal Research Fellow at the Ethiopian Economic Policy Research Institute. The chapter on Macroeconomic Developments was written by a team of researchers led by Dr. Seid Nuru. The team members who have contributed to this chapter include, Getachew Ahmed, Solomon Mossisa, and Helen Berga.

The chapter on the Performance of the Agricultural Sector has been written by Drs. Bekele Hundie and Samuel Gebre-Selassie. Amin Abdella wrote the chapter on the Performance of the Manufacturing Industry and the chapters on the thematic issue “*Small and Micro Enterprises (SMEs) Development in Ethiopia: Policies, Performance, Constraints and Prospects*”. Finally the Chapter on the Trends and Patterns of Gender Gaps in Urban Employment in Ethiopia is written by Dr. Degnet Abebaw, Fitsum Zewdu and Israel Fekade. The contribution of all these researchers is highly appreciated and recognized.

The report also benefited from many useful comments and suggestions received from the members of the EEA Executive Committee. We would like to acknowledge the contributions of Dr. Alemayehu Seyoum Taffesse, Dr. Gezahegne Ayele, Dr. Tadele Ferede, Dr. Fantu Guta, Dr. Amdissa Teshome, W/o Etalem Engeda, W/o Sindu Abebe, and Ato Demirew Getachew. The commitment and support as well as the encouragements of all the members of the Ethiopian Economics Association have always inspired those of us working for the Association to keep the momentum in spite of several challenges. We are all proud of them.

Many other people have also made very valuable contributions to this report, and we are grateful to them. A special thank goes to Ato Daniel Desta who served as the language editor. W/o Rahel Yilma also deserves special thanks for preparing and formatting the manuscript before it is sent to the publisher. The staffs of the Finance and the Administration Divisions as well as the documentation centre provided valuable administrative and logistic support during the preparation of the report. Other EEA staffs have also contributed to the successful completion of this project. Their contribution is also highly appreciated.

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Chapter I

Macroeconomic Performance

I.1. Growth

According to the newly revised national account of the Ministry of Finance and Economic Development (MoFED), the Ethiopian economy measured by real gross domestic product (GDP) was estimated to stand at 556.5 billion Birr in 2012/13 at 2010/11 constant factor cost. Measured by the current market prices, the volume of Ethiopian economy in the fiscal year 2012/13 was 852.7 billion Birr. This is equivalent to a nominal per capita income of 10,056 Birr or USD 516 at the official exchange rate.

Data from MoFED shows that real GDP grew by 9.7 percent during the fiscal year 2012/13. This growth rate, though lower than the 11 percent average growth rate for the last decade, is robust enough to reduce poverty. The better performance of the economy compared to the 8.8 percent growth in the preceding fiscal year is mainly due to a better performance of the agriculture and industry sectors.

Growth rates in value added in agriculture and industry sectors, both of which have 55 percent contribution to growth, were higher by 2.2 and 1.3 percentage points, respectively, than growth rates of 2011/12. The industrial sector grew faster than the other two major sectors during 2011/12-2012/13. However, its contribution to the overall growth is still small (i.e. only 24 percent) because the share of value added from total real GDP is only 12 percent. It takes an extraordinary expansion in the manufacturing sector to realize the structural

change in the economy envisaged by the growth and transformation plan (GTP) in the remaining two years.

Table I.1: Growth Rates

Period	Agriculture	Industry	Services	GDP	Per capita GDP
2000/01-2004/05	5.6	7.9	6.4	6.1	3.3
2005/06-2009/10	8.3	10.3	14.2	10.8	8.0
2011/12	4.9	17.1	10.6	8.8	6.1
2012/13	7.1	18.5	9.9	9.7	7.0

Source: EEA Computations using data from Ministry of Finance and Economic Development

The performance of the economy in 2012/13 deviated from the 11.3 percent planned growth rates under the base case scenario of GTP. Judged by the growth rates of value-added in the sectors, all three major sectors namely the service, agriculture and allied activities, and the industry sectors have performed well though expanded at lower rates than envisaged by the GTP. The three-year average growth rates depict similar differences between planned and actual figures, except for the industrial sector whose performance (18.1 percent) is a little higher than its target (17.8 percent) according to the revised data. [See Table I.2].

Table I.2: GTP Targeted Growth and Actual Performance by Sector for 2010/11-2012/13

Sector	GTP Target (Base case scenario)					Actual				
	2010/11-2014/15	2010/11-2012/13	2010/11	2011/12	2012/13	2010/11	2011/12	2012/13	2010/11-2012/13	
Agriculture	8.6	8.5	8.5	8.5	8.6	8.9	4.9	7.1	7.0	
Industry	20.0	17.8	14.0	17.9	21.4	18.7	17.1	18.5	18.1	
Service	10.6	11.5	12.5	11.5	10.5	11.5	10.6	9.9	10.7	
Real GDP	11.2	11.1	11.0	11.1	11.3	11.0	8.8	9.7	9.8	

Source: EEA computations using data from Ministry of Finance and Economic Development

On average, the Ethiopian economy grew by 9.8 percent during the first three years of GTP (2010/11-2012/13). Leaving aside issues that may arise on the accuracy and method of estimation, this rate is significant approaching the 11.1 percent growth target of GTP for the period.

Growth decomposition exercise by factors of production indicates 4.1 percentage points of the 6.3 percent growth in GDP during the period 1991/92-2012/13 was attributed to both labor and capital¹. The balance 2.3 percentage point of observed growth of GDP was a residual (total factor productivity). This was probably explained by other factors such as technological progress, and favorable weather conditions. Growth in capital stock contributed 1.4 percent of growth while the remaining 2.7 percent was attributed to growth in the active labor force.

Table 1.3: Growth Accounting by Factors of Production

	1991/92-2012/13	2005/06-2012/13
Average Rate of Growth	6.3	10.7
Growth due to		
Capital	1.4	2.4
Labor	2.7	2.6
TFP	2.3	5.7

Source: EEA computations using national accounts data from MoFED.

Similar exercise for the period 2005/06-2012/13 revealed a significantly high residual of 5.7 percentage points. While it might be difficult to associate the high residual with technological change, one can still attribute a significant component of the TFP to gains in efficiency in the agricultural sector. The Ethiopian

¹ Estimated stock of physical capital (using estimated capital-output ratio to determine initial stock of capital) grew by an annual rate of growth of 4.1 percent. The active labor force (i.e. population between ages 15-65) during the period 1996-2011 grew by 4 percent.

agriculture as well as the industry had in the past been characterized by sheer level of inefficiency. Modest manipulations in the system of production may result in growth that cannot solely attributed to only factors of production. Some part of the gains might also be attributed to favorable weather conditions. Nevertheless, a non-trivial part of the growth might still be due to measurement error.

Assessed in terms of the relative contributions of the major sectors/subsectors to the overall economic growth, the service sector is the major driving force in the 2012/13 fiscal year, contributing for 46 percent of total growth. This sector was in turn driven by wholesale and retail trade, which alone contributed 16 percent to the overall growth in GDP. Agriculture and allied activities followed the service sector with 31 percent contribution to the overall performance of the economy. The crop subsector, with 25 percent, takes the lion's share. Last in the list of major sectors contributing economic growth is industry sector with a 24 percent share. This significant upsurge compared to its performances prior to 2011 is due to the expansion in the construction subsector which accounted for 18 percent of observed growth in GDP (and 75 percent of the growth in the industry sector) during the period under review.

Table I.4: Growth Decomposition by Sector/Sub Sector

Industry/Sector	2000/01-2004/05		2005/06-2009/10		2003/04-2011/12		2011/12		2012/13	
	Weighted Growth	Share in Growth								
Agriculture, Hunting and Forestry	3.0	51.0	4.1	37.2	4.7	41.8	2.2	24.7	3.0	31.3
Crop	2.7	39.2	3.2	29.3	3.9	34.5	1.5	17.3	2.4	25.3
Animal Farming and Hunting	0.3	7.6	0.7	6.6	0.7	6.7	0.5	5.9	0.5	4.8
Forestry	0.2	4.4	0.2	1.5	0.2	1.4	0.1	1.4	0.1	1.2
Fishing	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Industry	0.8	18.9	1.0	9.3	1.2	11.6	2.0	22.5	2.3	23.6
Mining and Quarrying	0.1	2.5	0.1	1.3	0.2	1.9	0.2	2.2	0.1	1.0
Manufacturing	0.2	2.6	0.4	3.5	0.4	4.0	0.5	5.6	0.5	4.7
Large and Medium Scale Manufacturing	0.1	0.8	0.3	2.7	0.3	2.9	0.4	5.1	0.4	4.4
Small Scale and Cottage Industries	0.1	2.0	0.1	0.7	0.1	1.1	0.1	0.7	0.0	0.4
Electricity and Water	0.1	3.0	0.1	0.8	0.1	0.9	0.2	2.0	0.1	1.3
Construction	0.5	11.6	0.4	4.0	0.6	5.2	1.1	13.1	1.7	17.8

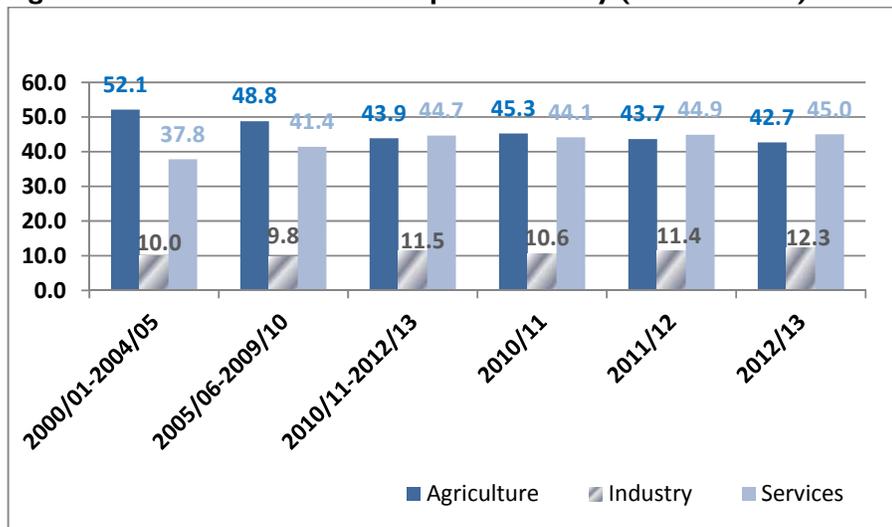
Table 1.4 cont'd...

Services	2.4	28.8	5.9	54.2	5.1	47.5	4.7	54.5	4.5	46.2
Whole Sale and Retail Trade	0.8	13.6	2.2	19.8	1.8	16.6	2.0	22.5	1.5	15.9
Hotels and Restaurants	0.1	2.2	0.6	5.8	0.5	4.9	0.4	4.2	0.7	7.7
Transport and Communications	0.5	5.3	0.4	3.9	0.5	4.4	0.5	6.3	0.8	8.4
Financial Intermediation	0.2	-6.9	0.4	3.5	0.4	4.1	0.7	7.9	0.0	0.2
Real Estate, Renting and Business Activities	0.7	33.7	1.3	11.7	1.1	9.8	0.3	3.9	0.3	3.4
Public Administration and Defense	-0.1	-15.3	0.4	4.0	0.4	3.5	0.4	4.6	0.4	4.4
Education	0.2	2.7	0.3	2.9	0.2	2.2	0.1	1.0	0.2	2.4
Health and Social Work	0.1	0.7	0.1	1.1	0.1	1.0	0.1	1.2	0.1	0.7
Other Community , Social & Personal Services	0.1	4.3	0.2	2.2	0.2	1.9	0.3	3.5	0.4	3.9
Private Households with Employed Persons	0.0	0.9	0.0	0.1	0.0	0.1	0.0	0.5	0.0	0.2
Total	6.0	100.0	10.9	100.0	11.0	100.0	8.7	100.0	9.7	100.0

Source: EEA computations using data from Ministry of Finance and Economic Development

Reading from Figure I.1, the structure of the Ethiopian economy is characterized by a decline in the share of value added in the agriculture in the GDP over the last decade. The service sector has overtaken the lead in dominating the economy judged by its contribution to the GDP. Nevertheless agriculture still remained to be dominant in employment creation and a major source of foreign exchange earnings. In the fiscal year 2012/13, the service sector took the upper hand with a 45.0 percent share of the total value added in contrast to the 38 percent share during 2000/01-2004/05. The share of agriculture in the GDP stood at 42.7 percent in 2012/13. The undesired outcome of the last decade and most importantly the last three years is the almost stagnant share of the industrial sector in the economy. The share of the industrial sector in 2012/13 was 12.4 percent depicting dismal increase from a 10 percent share during 2000/01-2004/05.

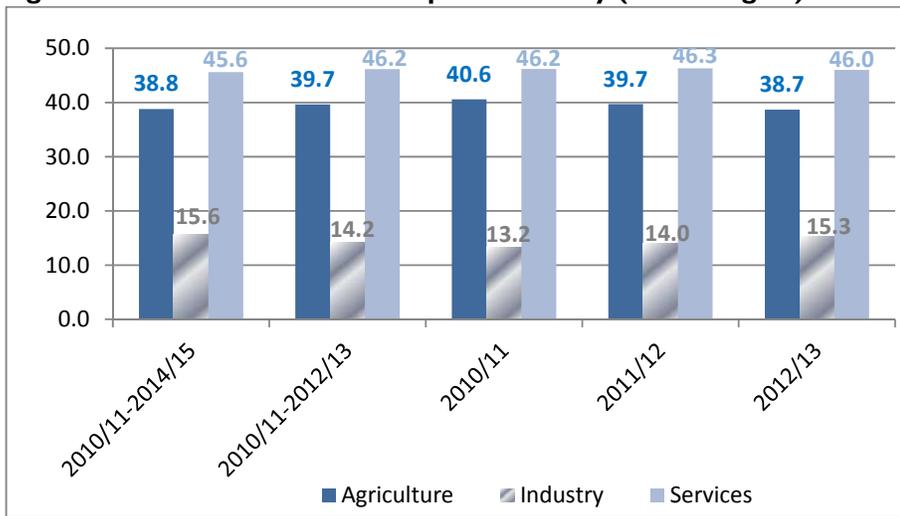
Figure I.1: Structure of the Ethiopian Economy (Performance)



Source: Ministry of Finance and Economic Development

The GTP had targeted the share of agriculture and industry to be 38.7 and 15.3 percent in 2012/13, respectively. Overall, the average share of agriculture for 2010/11-2012/13 was 44 percent against the GTP target of 39.7 percent. It was also planned that the average share of value added in the industry sector would be 15.3 percent in 2012/13. However, performance of this sector lagged behind with only 11.5 percent during the same period.

Figure I.2: Structure of the Ethiopian Economy (GTP Targets)



Source: Ministry of Finance and Economic Development

Agriculture

After slowing down in 2011/12 following the general trend of the value added in agriculture, value added in the crop agriculture accelerated with an annual rate of growth of 8.2 percent in the fiscal year under review. The fishing sub sector has been growing fast, with no significant contribution though, because this sub sector constitutes less than 1 percent of the total value added in agriculture.

Table I.5: Growth Rates of Sub Sectors in Agriculture

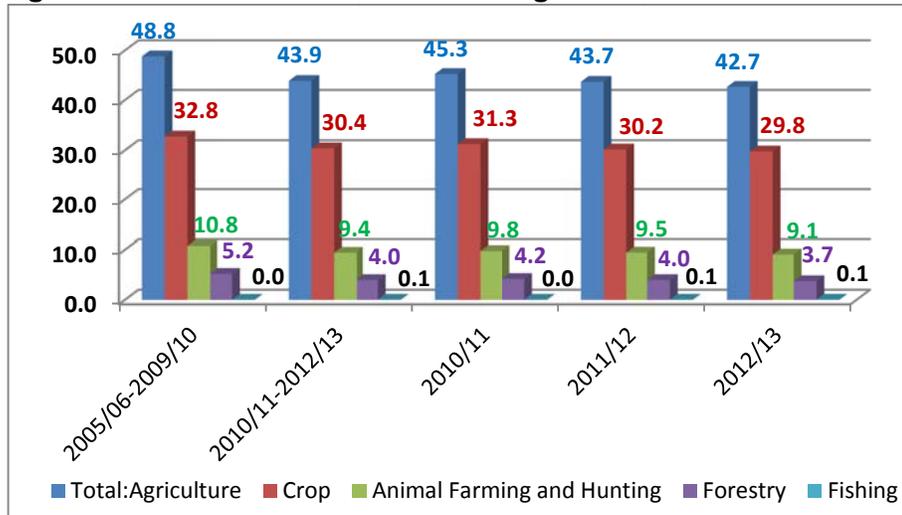
Sector/Sub-sector	2005/06- 2009/10	2010/11- 2012/13	2010/11	2011/12	2012/13
Total: Agriculture	8.3	7.0	8.9	4.9	7.1
Crop	9.8	7.8	10.3	5.0	8.2
Animal Farming and Hunting	6.7	6.0	7.5	5.4	5.2
Forestry	3.2	2.9	2.5	3.1	3.2
Fishing	12.3	15.5	5.9	21.3	19.4

Source: Ministry of Finance and Economic Development

Agriculture remains to be the mainstay of much of the employment and production of the rural sector of the Ethiopian economy. However, the relative size of value added in the sector has been declining, though slowly, over the period 2010/11-2012/13. The share of value added in agriculture from total GDP was 45.3 in 2010/11. This figure was 42.7 percent in the reporting period, lower by 1 percentage point than the 2011/12 performance. On average, the share of agriculture value added was 43.9 percent for the period 2010/11-2012/13. Although the relative size of this sector is declining over this period, it is still high compared to the targets set in the GTP.

Crop agriculture, and animal farming and hunting sub sectors constitute the major contributors of value added in agriculture. Value added from crop agriculture, which is the dominant sector in the Ethiopian agriculture in terms of both employment and production, takes the lion's share from the total value added in the sector. The share of this sub sector was 30.4 percent of total value added for the period 2010/11-2012/13. In 2010/11, crop agriculture constituted 31.3 percent. In the reporting period, this figure remained almost constant (i.e. 29.8 percent).

Figure I.3: The Share of Sub Sectors in Agricultural Sector in the GDP

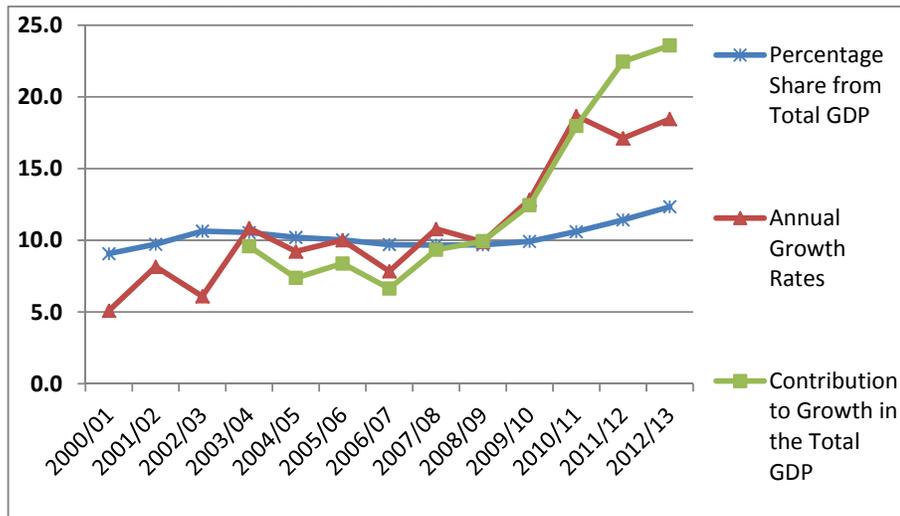


Source: Ministry of Finance and Economic Development

Industry

Looking at the past and existing development plans, the main objective of the Ethiopian government has been to promote industrialization by increasing the contribution of the industrial sector in general and the manufacturing sub-sector in particular in the total GDP and economic growth. The data reveals (see Figure I.1) that there is an annual steady increase in the value added of the sector. The average annual rate of growth for the first three GTP years is 18.1 percent, much higher than 10.3 percent, the average for PASDEP period. The figure for the five-year average preceding PASDEP was 7.9 percent.

Figure I.4: Share, growth rate, and contribution to growth the total GDP of Industrial Sector



Source: Ministry of Finance and Economic Development

Beginning in the second year of PASDEP, the contribution of the industrial sector to overall growth also accelerated from 6.6 percent in 2006/07 to 23.6 percent in 2012/13. Nevertheless, this relatively high growth rate in the industrial sector could not lead to the much anticipated structural transformation (it has a share of 12.3 percent in the GDP) due to the fact that the sector has a low base and other sectors in particular services are growing fast as well.

The increase in the share of the industrial sector, though marginal, for the last few years came from the construction sub-sector. The share of this sub-sector was 4.1 percent in 2010/11, 4.7 percent in 2011/12 and 5.6 in 2012/13. The average share for the first three GTP years was 4.8 percent, which is higher by 0.8 percentage points from the preceding five years (i.e. PASDEP period).

Table 1.6: The Share of Sub Sectors in Industrial Sector from Total GDP

Sectors/Sub-Sectors	2005/06- 2009/10	2010/11- 2012/13	2010/11	2011/12	2012/13
Industry	9.8	11.5	10.6	11.4	12.3
Mining and Quarrying	0.8	1.5	1.5	1.5	1.5
Manufacturing	3.8	4.1	4.0	4.2	4.2
Large and Medium Scale Manufacturing	2.5	2.8	2.6	2.8	2.9
Small Scale and Cottage Industries	1.4	1.3	1.4	1.4	1.3
Electricity and Water	1.2	1.1	1.0	1.1	1.1
Construction	3.9	4.8	4.1	4.7	5.6

Source: Ministry of Finance and Economic Development

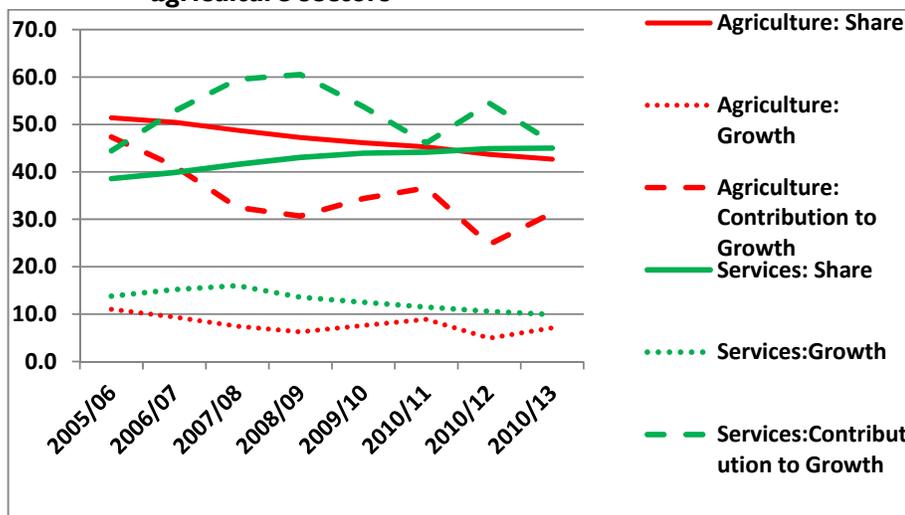
The share of the manufacturing sub-sector, which includes large, medium and small-scale manufacturing, is only 4 percent of total value added for the period 2010/11-2012/13, which is almost the same as the average for the PASDEP period (i.e. 2005/06-2009/10).

Services

Traditionally, agriculture has been the leading sector, followed by service, in the Ethiopian economy as measured by the share of its value added in total GDP. On average, the share of agriculture for the period 2005/06-2009/10 was 48.8 percent while that of the service sector was 41.4 percent for the same period. In 2010/12, there was a shift of dominance from agriculture to the service sector. This dominance has continued to 2012/13 by a slow increase in importance of the service sector in the economy.

For the first three years of the GTP period, agriculture constituted 43.9 percent of GDP. On the other hand, the share of the service sector has increased to 44.7 percent in the face of low and stagnant share of the manufacturing sector in the overall economy. This scenario has in fact been well recognized by the government as policy makers stressed the need for the private sector to divert its focus of investment from the service sector to the manufacturing sector.

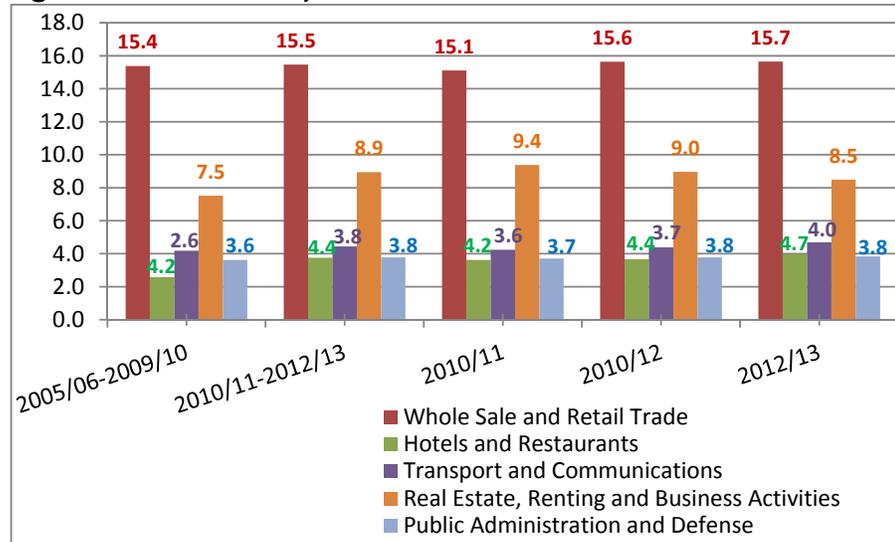
Figure I.5: Share, rate of and contribution to growth of the service and agriculture sectors



Source: Ministry of Finance and Economic Development

The high and quick return in the service sector is believed to be one of the main reasons for the low participation of the private sector in the high-tech and relatively risky manufacturing sector. Shortage of power and raw materials, lack of investment capital, shortage of skilled manpower in the sector, and absence of fair competition are the most frequently cited reasons for the low performance of the industrial sector vis-à-vis the service sector.

Figure I.6: Share of Major Sub-sectors in Service Sector



Source: Ministry of Finance and Economic Development

An important sub-sector in the service sector which has not shown a deceleration is wholesale and retail trade. It constitutes a little more than 15 percent of total value added in the economy. The share of this sub-sector was 15.4 percent of GDP during period 2005/06-2009/10. The other important contributor to the service sector is the real estate, renting and business activities sub-sector. This sub-sector had a 9 percent share in the GDP during the first three years of GTP.

1.2. Saving and Investment

Both private and public savings are important sources for financing required domestic investment. Domestic saving relative to investment has been low in Ethiopia mainly because of the low level of household income which mostly

finances consumption. The gap between domestic saving and investment is covered by resources from external sources.

Gross domestic saving was 17.7 percent of GDP during the reporting period, which is higher by 2.7 percentage points than the 2011/12 performance. It is also much higher compared with the GTP target of 12.4 percent in the same period. The rate of gross domestic saving has shown a continuous increase during the last three years. The 15.1 percent average rate of gross domestic saving recorded during 2010/11-2012/13 is higher than the 9.8 percent average rate of gross domestic saving that has been observed during the preceding five years (2005/05-2009/10).

Table I.7: Expenditure on GDP as a Percentage of GDP (Performance)

Actual	2010/11	2011/12	2012/13	2010/11- 2012/13	2005/06- 2009/10	2000/01- 2004/05
Total Consumption	87.3	85.0	82.3	84.9	90.2	89.1
Private Final Consumption Expenditure	78.6	77.8	75.0	77.2	79.5	74.5
Government Final Consumption Expenditure	8.6	7.2	7.3	7.7	10.7	14.6
Gross Capital Formation (Investment)	27.9	33.1	33.0	31.3	25.6	25.9
Gross Domestic Saving	12.7	15.0	17.7	15.1	9.8	10.9
Export	17.0	13.9	12.7	14.5	12.5	13.7
Import	32.1	32.0	28.0	30.7	32.5	29.2
Resource Balance	-15.1	-18.1	-15.3	-16.2	-20.0	-15.5

Source: Ministry of Finance and Economic Development

Another way of looking at this is to see what is happening to the share of total final (i.e. private and government) consumption. The share of total final consumption from GDP, and in particular the share of private final consumption,

has been declining for the period 2010/11-2012/13. More than 87 percent of GDP was allocated to both public and private final consumption. This figure was down to 82.3 percent of GDP in the reporting period. On average, 84.9 percent of GDP was consumed for the period 2010/11-2012/13. This is lower by 5.4 percentage points than the average for the preceding five years (i.e. 2005/05-2009/10). The major contributor to this decline in the share of total final consumption is private final consumption, which went down to 75 percent in the reporting period from 79 percent in 2010/2011. It may support the argument that saving is luxury in the sense that it grows with income.

Investment during the reporting period did not show a significant change compared to the 2011/12 performance. Thirty three percent of nominal GDP was allocated for gross capital formation. This is higher than the rate targeted by the GTP plan during this period. The average share of investment for the period 2010/11-2012/13 is 32 percent compared to the average for the preceding five years (i.e. 2005/06-2009/10).

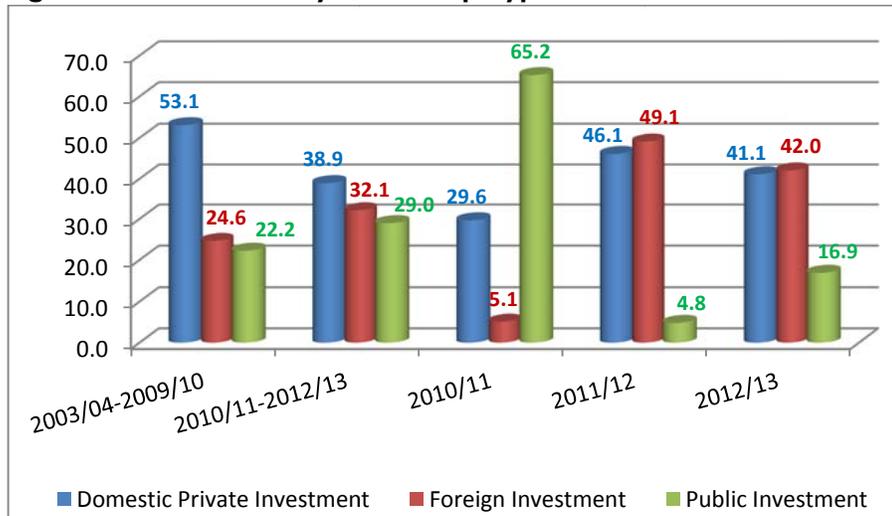
Table I.8: Expenditure on GDP as a Percentage of GDP (GTP Targets)

Item	2010/11	2011/12	2012/13	2010/11- 2012/13	2010/11- 2014/15
Total Consumption Expenditure	92.6	89.6	87.6	89.9	88.1
Gross Domestic Capital Formation	25.3	27.2	28.1	26.9	27.5
Exports of Goods and Non-Factor Services	16.6	17.7	19.2	17.8	19.4
Imports of Goods and Non-factor Services	34.5	34.5	34.9	34.6	35.0
Gross Domestic Saving	7.4	10.4	12.4	10.1	11.9
Resource Balance	-17.9	-16.8	-15.7	-16.8	-15.6

Source: Ministry of Finance and Economic Development

Increasing gross domestic saving with no significant change in the rate of gross capital formation meant the resource gap as percent of GDP narrowed during the reporting period compared to the gap in the preceding year. Hence, 15.7 percent of total investments during the reporting period were financed from external sources (aid and concessional loans). This resource gap is 3 percentage points lower than the resource gap in 2011/12. Moreover, the average for the three years 2010/11-2012/13 (i.e. 16 percent) is also lower than the preceding five years (i.e. 2005/05-2009/10).

Figure I.7: Investment by Ownership Type



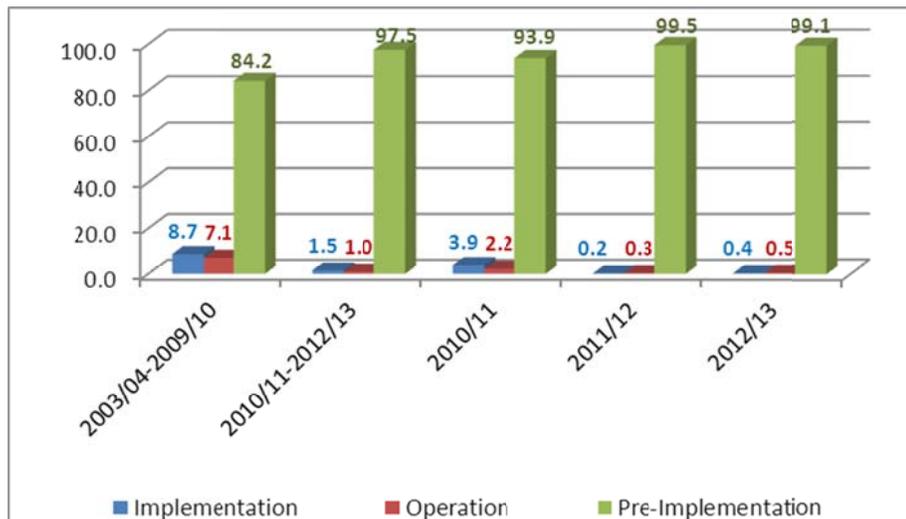
Source: Ethiopian Investment Agency

Looking at the structure of total investment by ownership type, domestic private investment and foreign investment had significant contributions during the reviewing period, as was the case in 2011/12. In 2012/13, 42 percent of the total capital for licensed investments was accounted for by foreign investment followed by domestic private investment with 41 percent of total capital for

licensed investments. Public investment is 16 percent of total investment, which increased from its lowest of 4.5 percent in the last few years.

Although total private domestic and foreign investment capital was significant, not all investment licenses were implemented. In the reporting period for example, 99 percent of total capital of licensed investments was only under pre-implementation. Only 0.5 percent was in operation (i.e. started their production) during the review period. Another 0.4 percent of these investment outlays were under implementation phase.

Figure I.8: Status of Domestic Private Investment by Implementation

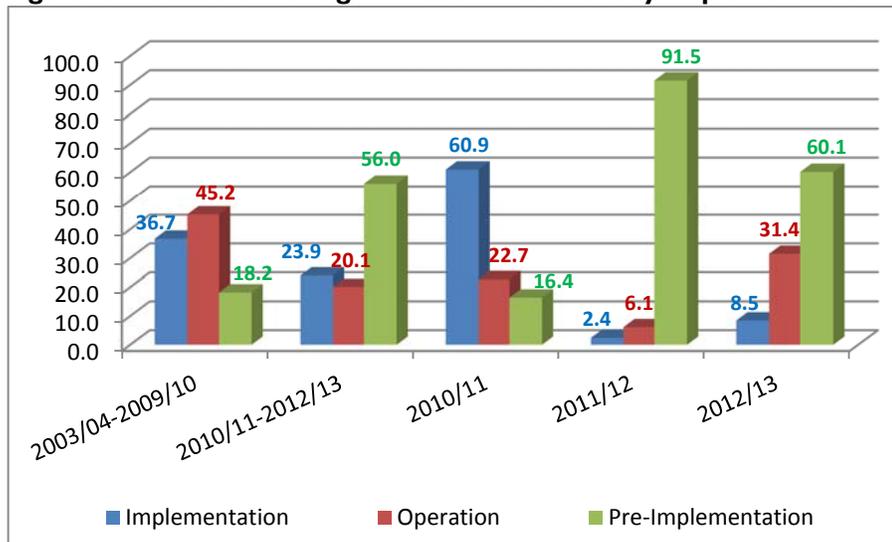


Source: Ethiopian Investment Agency

Better performance is observed in foreign private investment during the review period and in the preceding few years. In 2012/13, while 60 percent of total foreign investment outlays were under pre-implantation, 31 percent of them

started operation. The performance during the review period is better compared to the performance in 2011/12 during which 92 percent of foreign private investment outlays were under pre-implementation and only 6 percent under operation.

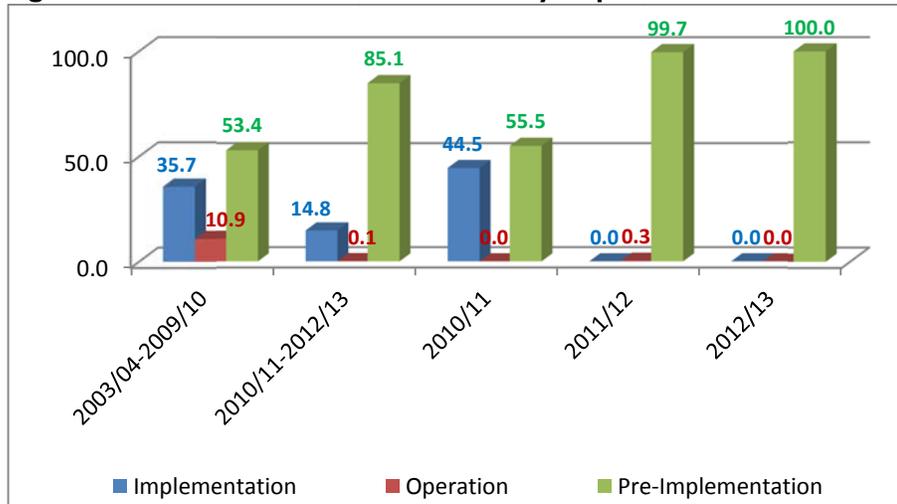
Figure I.9: Status of Foreign Private Investment by Implementation



Source: Ethiopian Investment Agency

The status of investment projects by the public sector is even worse. During the review period, 100 percent of these projects were under pre-implementation phase which, compared to the performance in 2011/12, remains almost the same. The period average for 2010/11-2012/13 of public investment outlays that went operational remains staggeringly low with only 0.1 percent while 85 percent of these outlays were under implementation phase.

Figure I.10: Status of Public Investment by Implementation



Source: Ethiopian Investment Agency

The Table I.9 shows the contribution of private domestic, public and foreign investments to the number of projects, capital invested and temporary and permanent employment across major sectors. In the review period, 341 projects were given licenses with capital outlays of ETB 12.5 billion in the agricultural sector. These investments created temporary and permanent employment opportunities for more than 183 thousand people. Close to 63 percent of the projects is undertaken by domestic private investors and the rest by foreigners. Much of the capital outlays (i.e. 86 percent) in the agriculture sector were made by foreign investors while the remaining 14 percent was made by private domestic investors.

Similar patterns exist in the industrial sector as regards contributions of investment by type. More than 60 percent of projects with only 9 percent of capital are given licenses for private domestic investors. However, 38 percent of

these investment projects in the sector contribute to 58 percent of the capital invested. The structure of the investment pattern changes when it comes to the service sector and 95 percent of the projects with 85 percent of capital was invested by private domestic investors, which created employment for 77 percent of the people. The share of public investment was small compared to the other group of investors. During the review period, public investment constituted 33 percent of the total capital outlays in the industrial sector.

Table 1.9: Share in the Number of Projects, Capital and Employment by Investment Type across Sectors

Type	Agriculture			Industry			Services		
	No. of Projects	Capital	Employment (Temp. and Perm.)	No. of Projects	Capital	Employment (Temp. and Perm.)	No. of Projects	Capital	Employment (Temp. and Perm.)
Domestic	62.8	13.6	40.0	60.4	9.3	46.0	95.3	85.0	77.2
Public	0.0	0.0	0.0	1.6	33.1	0.6	0.0	0.0	0.1
Foreign	37.2	86.4	60.0	37.9	57.6	53.5	4.7	14.9	22.7

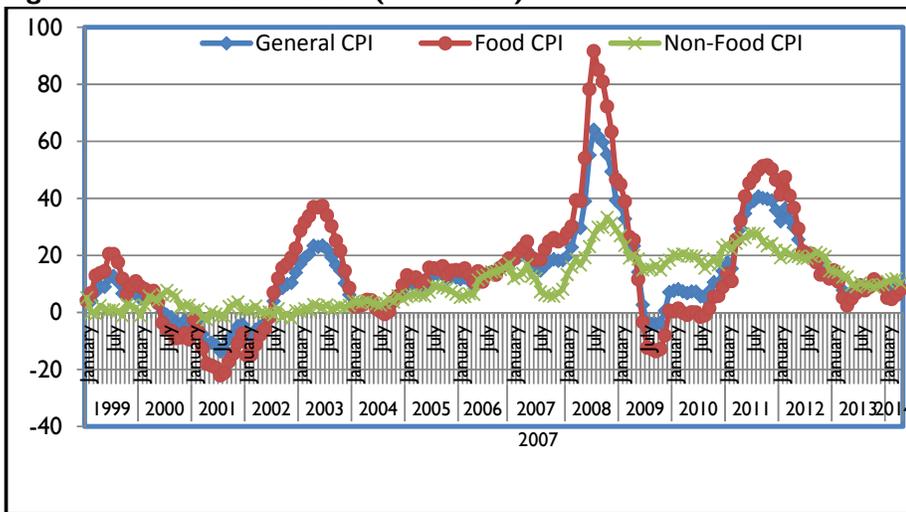
Source: Ethiopian Investment Agency

1.3. Price Developments

Price stability is critical for a long run growth. High and varying inflation has social and economic costs to the economy. As a result, price stability makes one of the central goals of monetary policy (and other policies in general). Price stability is a means by which policy can achieve its other objectives. When prices are stable, both economic growth and macroeconomic stability are likely to be enhanced, and long-term interest rates are likely to be moderate. In this respect, price stability is both a goal and an end to monetary policy.

Inflation has become one of the most pressing macroeconomic problems of the Ethiopian economy in the recent years. In particular, starting from the early 2000s, Ethiopia had been struggling to maintain low and stable prices. Inflation grew with strong momentum starting from 2003 to reach a record high of over 60 percent in mid 2008. Generally, one can categorize the recent price spikes in Ethiopia into three phases. The first inflationary episode started during the late 2002 just after the recession of 2000/01. This inflationary pressure was led by the food price rise. In mid-2003, food inflation climbed to above 30 percent, and as a result the general price surpassed the past decades' record high of 20 percent. The second inflationary episode, which was more rampant than the preceding one, started to soar soon after the national election of 2005 and continued to rise to over 50 percent in June 2008. The third came few years after the second and stayed longer to subside.

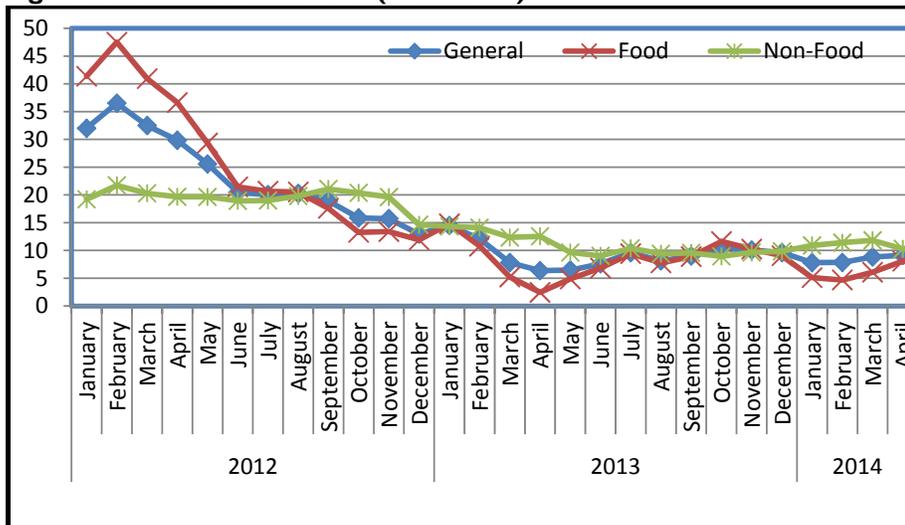
Figure I.11: Annual Inflation (1999-2014)



Source: Computed from CSA data

There are some important trends in the Ethiopian price data since the early 2000s. First, inflation episodes in Ethiopia tend to be associated with periods of uncertainties such as war and elections, drought, and high rate of monetary expansion. Second, non-food inflation tends to be more stable than the food and general inflation. Over the last decade, non-food inflation has been less erratic and only surpassed food inflation level in the early and late 2000s. Finally, except during the bumper harvest of the 2000/01 and the famine of 2002/03, it seems that Ethiopian food inflation had little correlation with economic growth and growth of agricultural output.

Figure I.12: Annual Inflation (2012-2014)



Source: Computed using CSA data

In the past two years, inflation has shown a sign of moderation in Ethiopia. Since early 2012, general inflation has sharply decreased to reach a single digit target of GTP in March 2013 for the first time. The momentum has not significantly changed and remained slow ever since. In the past fiscal year, overall inflation

rate (annual 12 months moving average) rose by 8.69 percent in April 2014 as compared to a similar period a year before. Food inflation increased by 7.7 percent and non-food price rose by 10 percent. Similar to the past trends where price spikes were largely led by food inflation, the current sharp decrease in prices is led by food price collapse. It plunged from year on year inflation of 41 percent in January 2012 to less than 6 percent inflation in March 2013. Unlike food inflation, non-food inflation obstinately remained above single digit for the past several months. Over the same period, non-food inflation decreased from 19 percent to only 12 percent in March 2012.

1.4. Monetary Developments

The major goal of Ethiopian monetary policy is to maintain monetary, credit and financial environment that promotes sustainable economic growth, preserves purchasing power of the national currency and encourages the mobilization of domestic and foreign savings. Despite the poorly developed financial and capital markets that obstinately respond to the needs of the economy, the National Bank of Ethiopia uses the monetary aggregates to influence and implement the national development plan. In particular, given the capital intensive nature of the mega projects of the country, the recent monetary developments have been the outcome of the National Bank's desire to re-direct domestic finances to public projects and mobilize saving from domestic sources. Consequently, it is instrumental to conceive the trends of Ethiopian monetary developments in the context of the growth and transformation plan of the country.

Table I.10: Growth Rates of Monetary Aggregates

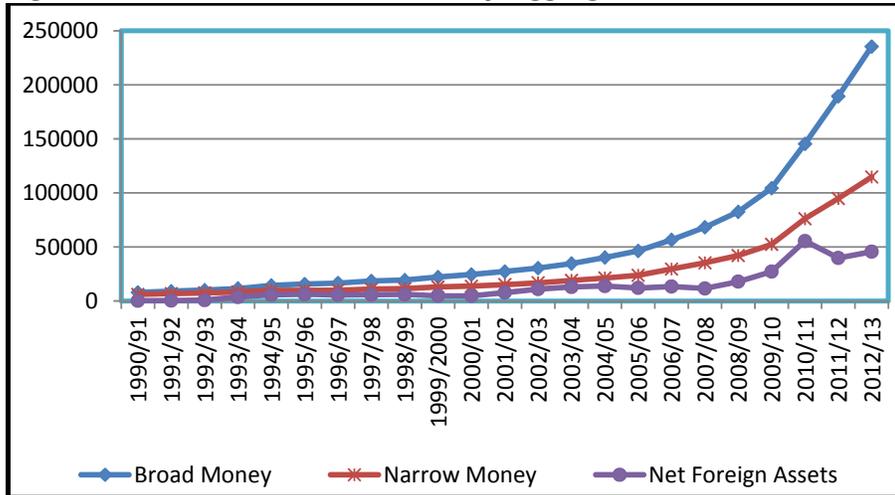
Year	2000/1- 2004/5	2005/6- 2009/10	2010/11	2011/12	2012/13
Net Foreign Assets	25.83	18.05	104.25	-28.36	14.73
National Bank of Ethiopia	44.93	17.79	113.58	-35.31	--
Commercial Banks	9.72	76.49	88.91	-18.27	--
Domestic Credit	9.39	21.13	29.82	39.49	23.44
Claims on Gov't	8.03	9.09	-13.21	-24.76	1.89
National Bank of Ethiopia	15.89	16.23	15.21	0.04	--
Commercial Bank of Ethiopia	36.51	35.47	163.49	42.67	--
Claims on other Sectors	12.09	31.15	49.72	56.71	26.21
Broad Money	12.66	21.08	39.21	30.28	24.24
Narrow Money	10.32	19.84	45.27	24.52	20.98
Currency outside banks	11.32	19.44	34.57	18.3	18.51
Demand Deposits	9.58	20.44	54.44	29.17	22.66
Quasi-Money	15.75	22.45	33.09	36.62	27.52

Source: EEA computation using NBE data

In the past fiscal year, the money supply grew by 24 percent from the previous period, with its components, narrow money and quasi money, contributing 11.82 percent and 12.42 percent respectively, to the growth rate. This growth contribution came from 20.98 and 37.52 percent growth rate of narrow money and quasi money from the previous year's stock, respectively. Similarly, the components of currency outside the banks and demand deposits grew by 18.51 percent and 22.66 percent from the previous year, accounting for 8.35 percent and 12.63 percent respectively, of the overall narrow money supply growth rate. These growth rates of narrow and broad money supply which are significantly less than the previous years' growth rate seemed to have targeted to abate the escalating prices in the economy. Although it is difficult to quantify the magnitude,

it is beyond doubt that the deceleration of money supply growth has contributed to the recent downward trend in prices.

Figure I.13: Trends of Some Monetary Aggregates



Source: EEA computation using NBE data

Net foreign assets has been the most unstable monetary aggregate in recent years. In 2010/11 it increased by more than 100 percent to reach 55.5 million ETB and the following year it was cut by about one third of the previous year's level. However, in the fiscal year under discussion (2012/13) net foreign assets expanded by about 15 percent from the previous year. Indeed, this low accumulation rate of the foreign assets is consistent with the National Bank's objective to contain inflation within single digit level. On the other hand, the growth rate of domestic credit has been increasingly stable over the last few years. It increased by about 23 percent, significantly less than the previous year's growth rate. Claims on other sectors' account for a significant growth of the domestic credit contribute for about 21 percent of its growth. Recent trends

indicate that claims on the government are dwindling. In the past two years it has shrunk by a significant amount while it grew with a margin in the current fiscal year. Perhaps this has potential connection to the new NBE directive that requires commercial banks to purchase government bonds for an amount of 27 percent of their loan disbursement.

1.5. External Sector

Balance of Payments

The overall balance of payments in 2012/13 shows an increase of USD 58 million, which is an improvement compared to a decline of USD 973 million in 2011/12. Capital account, which increased by 52 percent compared to 2011/12, contributed to this improvement in the overall balance of payments. USD 1.7 billion loan disbursements were made in the reporting period compared to just a bit higher than USD 1 billion in 2011/12. Moreover, the current account has also showed an increase, mainly due to private transfers, exports of non factor services), compared to the previous year. Caution should be made in interpreting these figures, however, as there are unexplained errors and omissions of USD 863 million.

Table I.11: Balance of Payments (millions of USD)

Particulars	2009/10	2010/11	2011/12	2012/13	Percentage Change		
	A	B	C	D	B/C	C/D	D/C
Exports, f.o.b.	2,003.1	2,747.1	3,152.7	3,075.2	37.1	14.8	-2.5
Coffee	528.3	841.8	833.0	745.1	59.3	-1.0	-10.6
Other	1,474.8	1,905.3	2,319.7	2,330.1	29.2	21.7	0.4
Imports	8,268.9	8,253.3	11,061.2	11,467.2	-0.2	34.0	3.7
Fuel	1,310.7	1,659.3	2,124.7	2,163.8	26.6	28.0	1.8
Cereals	513.1	196.0	652.5	560.8	-61.8	232.9	-14.1
Aircraft	0.8	24.7	42.1	7.7	2,987.5	70.4	-81.7
Imports excl. fuel, cereals, aircraft	6,444.3	6,373.3	8,241.8	8,734.9	-1.1	29.3	6.0
Trade Balance	-6,265.8	-5,506.2	-7,908.5	-8,392.0	-12.1	43.6	6.1
Services, net	457.4	688.1	74.9	459.1	50.4	-89.1	513.0
Non-factor services, net	513.0	757.6	171.1	571.7	47.7	-77.4	234.1
Exports of non-factor services	2,044.0	2,585.5	2,810.5	2,852.9	26.5	8.7	1.5
Imports of non- factor services	1,531.0	1,827.9	2,639.4	2,281.2	19.4	44.4	-13.6
Income, net	-55.3	-69.5	-96.2	-112.6	25.7	38.4	17.0
Private transfers	2,709.6	2,746.7	3,245.8	3,889.2	1.4	18.2	19.8
o/w: Private Individuals	1,847.3	1,886.3	1,945.9	2,491.3	2.1	3.2	28.0
Current account balance (exc. off. transfers)	-3,098.8	-2,071.4	-4,587.8	-4,043.7	-33.2	121.5	-11.9
Official transfers	1,905.6	1,860.7	1,787.9	1,740.5	-2.4	-3.9	-2.7
Current account balance (inc. off. transfers)	-1,193.2	-210.7	-2,799.9	-2,303.2	-82.3	1,228.9	-17.7
Capital account	1,996.2	2,535.5	2,119.8	3,224.0	27.0	-16.4	52.1
Off. Long-term Cap., net	857.2	1,019.3	937.8	1,685.1	18.9	-8.0	79.7

Table I.11 cont'd...

Disbursements	894.0	1,054.5	1,007.0	1,743.3	18.0	-4.5	73.1
Amortization	36.8	35.2	69.2	58.2	-4.3	96.6	-15.9
Other public , long-term cap.	186.4	430.3	230.8	398.9	130.8	-46.4	72.8
Foreign Direct Investment (net)	956.4	1,242.5	1,072.1	1,231.6	29.9	-13.7	14.9
Short-term Capital	-3.8	-156.6	-120.9	-91.6	4,021.1	-22.8	-24.2
Errors and omissions	-486.4	-940.6	-292.8	-863.0	93.4	-68.9	194.7
Overall balance	316.6	1,384.2	-972.9	57.8	337.2	-170.3	-105.9
Financing	-316.6	-1,384.2	972.9	-57.8	337.2	-170.3	-105.9
Reserves (- Increase)	-304.6	-1,375.8	980.9	-51.0	351.7	-171.3	-105.2
Central Bank (NFA)	57.8	-932.2	846.6	-62.6	-1,712.8	-190.8	-107.4
Asset	-397.7	-1,065.0	810.0	-133.4	167.8	-176.1	-116.5
Liabilities	455.5	132.8	36.6	70.8	-70.8	-72.4	93.4
Commercial banks (net)	-362.4	-443.6	134.3	11.6	22.4	-130.3	-91.4
Debt Relief	-12.0	-8.4	-8.0	-6.8	-30.0	-4.8	-15.0

Source: Ministry of Finance and Economic Development

In the reporting period, the total values of exported commodities declined by 2.5 percent compared to 2011/12. A decrease in the volume of exports (e.g. coffee, oilseeds and live animals), and unit price (e.g. gold) have contributed to this decline in total exports. On the other hand, values of Ethiopian import bills have increased by 3.7 percent during in this period. Imports of fuel, and other commodities excluding cereals and aircraft contributed to this increase. The combination of a decrease in exports and an increase in imports widened the trade balance by 6.1 percent. However, due to an inflow of net trade-in-services and private and official transfers, the current account balance has improved a lot.

Exports

The export earnings of the country has been increasing for the last four years starting from USD 1448 million in 2008/09 to USD 3.2 billion in 2011/12. However, export earnings in the reported period amounted to 3.1 billion lower than the earnings 2011/12 (i.e. a 2.5 percent decline). Export values of coffee, oil seeds, flower, gold and live animals are the major contributors of this decline. Export proceeds of coffee (USD 746 million) constitute 24 percent of the total export proceeds during the reporting period. This share was 26 percent in 2011/12. The decline is due to a decrease in its unit price by 23.5 percent. There was also a reduction in the export value of coffee in the previous year but for a different reason: decrease in the volume of exports.

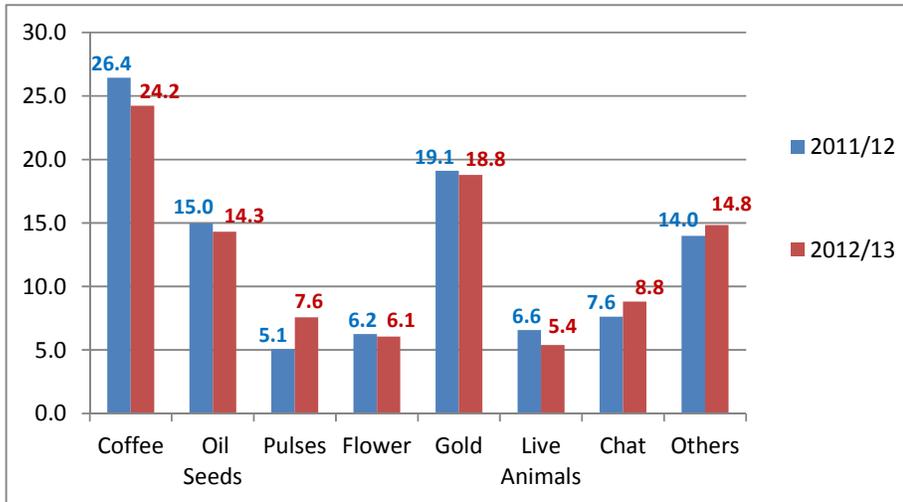
Table I.12: Value of Exports by Major Commodities (millions of USD)

Commodities	2008/09	2009/10	2010/11	2011/12	2012/13	Percentage Change			
	A	B	C	D	E	B/A	C/B	D/C	E/D
Coffee	375.9	528.3	841.8	833.1	746.4	40.5	59.3	-1.0	-10.4
Oil Seeds	356.1	358.5	326.6	472.3	440.9	0.7	-8.9	44.6	-6.6
Leather and Leather products	75.3	56.4	103.8	109.9	121.9	-25.1	84.0	5.9	11.0
Pulses	90.8	130.1	137.9	159.7	233.3	43.3	6.0	15.8	46.1
Meat & Meat Products	26.5	34.0	63.3	78.8	74.3	28.3	86.2	24.5	-5.7
Fruits & Vegetables	12.1	31.5	31.5	44.9	43.6	160.3	0.0	42.5	-2.8
Flower	130.7	170.2	175.3	197.0	186.7	30.2	3.0	12.4	-5.2
Gold	97.8	281.4	461.7	602.4	578.8	187.7	64.1	30.5	-3.9
Live Animals	52.6	90.7	147.9	207.1	166.4	72.4	63.1	40.0	-19.7
Chat	138.7	209.5	238.3	240.3	271.5	51.0	13.7	0.8	13.0
Bees Wax	1.5	1.6	1.8	2.2	2.7	6.7	12.5	22.2	21.4
Others	89.9	110.9	217.3	205.0	214.5	23.4	95.9	-5.7	4.7
Grand Total	1,447.9	2,003.1	2,747.2	3,152.7	3,081.2	38.3	37.1	14.8	-2.3

Source: National Bank of Ethiopia

Exports of gold whose share in total export earnings is 19 percent also contributed to the reduction in total exports in 2012/13. Both the unit price and volume of exports of gold went down during this period compared to 2011/12.

Figure I.14: The Share of Export Items from the Total Export



Source: National Bank of Ethiopia

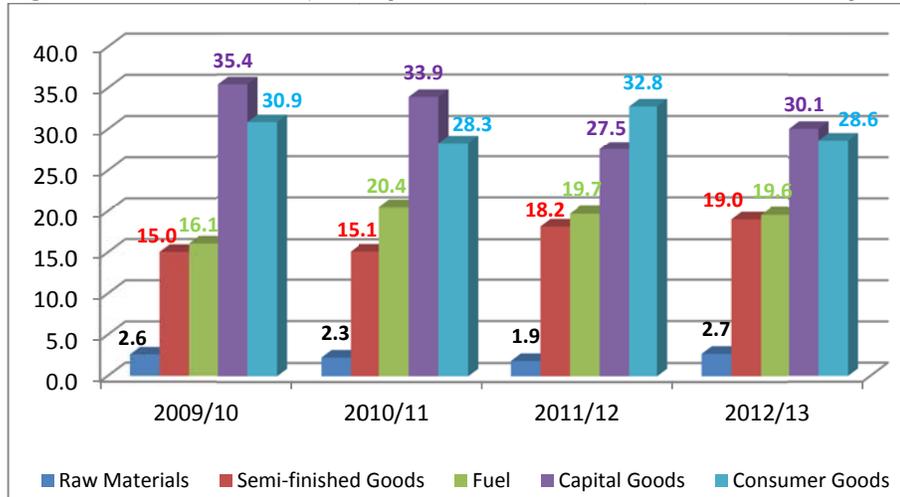
Imports²

The major imported items of the country include raw materials, semi-finished goods, fuel, capital and consumption goods. The total value of these imports in the review period was USD 11.5 billion. Capital goods constitute the major share of imported commodities in the review period. Both the share and growth rates

² Only 11-month data were available on imports by end-use (i.e. by commodities) for 2012/13. Since we have the actual values of total imports, imports during the 12th month was estimated using the actual difference between the total value of imports and the 11 month value of imports and applied this difference to the respective imported commodities.

of these imported commodities increased compared to the preceding year. The country imported capital goods of value USD 2.2 billion (i.e. 30 percent of total imports) in 2012/13 which grew by 11 percent compared to 2011/12 fiscal year.

Figure I.15: Share of Major Imported Commodities from Total Imports



Source: National Bank of Ethiopia

Following capital goods, consumer goods were also significant in their share in total imported commodities. They constituted 29 percent of total import during the review period. Import values of fuel did not show a significant change in 2012/13 compared to the preceding two years. The country spent USD 2.2 billion to import fuel. On average, around 20 percent of the country's value of import is fuel for the period 2010/11-2012/13. The value of semi-finished goods has been increasing from time to time. In 2009/10, Ethiopia imported USD 1.2 billion in semi-finished goods, whose share from total imports is 15 percent. In the review period, USD 2.2 billion of semi-finished goods were imported. The share of these goods has also increased to 19 percent.

Table I.13: Value of Imports by End Use (Millions of USD)

Categories	2009/10	2010/11	2011/12	2012/13		Percentage Change		
	Annual	Annual	Annual	Eleven Months	Annual Est.	B/A	C/B	E/C
	A	B	C	D	E			
Raw Materials	212.4	183.7	199.7	291.2	311.8	-13.5	8.7	56.1
Semi-finished Goods	1,226.5	1,228.0	1,957.2	2,036.3	2,180.6	0.1	59.4	11.4
Chemicals	114.8	130.1	154.6	314.7	337.0	13.3	18.8	118.0
Fertilizers	249.4	342.4	604.6	266.5	285.4	37.3	76.6	-52.8
Textile Materials	23.5	29.2	41.0	150.6	161.3	24.3	40.4	293.4
Others	838.7	726.3	1,157.0	1,304.4	1,396.9	-13.4	59.3	20.7
Fuel	1,310.6	1,659.3	2,124.8	2,094.9	2,243.4	26.6	28.1	5.6
Petroleum Products	1,303.0	1,648.8	2,078.3	1,983.3	2,123.9	26.5	26.0	2.2
Others	7.7	10.5	46.4	111.6	119.5	36.4	341.9	157.6
Capital Goods	2,886.3	2,757.0	2,961.7	3,214.9	3,442.7	-4.5	7.4	16.2
Transport	509.8	688.1	809.7	914.9	979.7	35.0	17.7	21.0
Tyres for Heavy Vehicles	102.0	85.6	106.8	186.5	199.7	-16.1	24.8	87.0
Heavy Road Motor Vehicles	403.6	575.1	652.5	702.8	752.6	42.5	13.5	15.3
Aircraft	0.8	24.7	42.1	18.9	20.3	2987.5	70.4	-51.8
Others	3.4	2.6	8.3	6.5	7.0	-23.5	219.2	-15.9
Agricultural	59.8	63.6	119.5	-	-	6.4	87.9	-100.0
Industrial	2,316.7	2,005.4	2,032.5	1,649.8	1,766.7	-13.4	1.4	-13.1
Consumer Goods	2,515.7	2,294.8	3,531.7	3,061.0	3,277.9	-8.8	53.9	-7.2
Durables	865.0	868.5	1,105.3	669.0	716.4	0.4	27.3	-35.2
Radio & T.V.	12.5	16.9	15.4	84.1	90.1	35.2	-8.9	485.1
Tyres for cars & Other Vehicles	40.4	35.0	45.4	54.9	58.8	-13.4	29.7	29.6
Cars & Other Vehicles	215.8	218.2	269.8	247.1	264.6	1.1	23.6	-1.9
Others	596.4	598.5	774.7	282.9	302.9	0.4	29.4	-60.9
Non-durables	1,650.7	1,426.3	2,426.4	2,391.9	2,561.4	-13.6	70.1	5.6
Cereals	513.1	196.0	652.5	540.7	579.0	-61.8	232.9	-11.3
Other Food	211.3	249.5	382.7	785.1	840.8	18.1	53.4	119.7
Medical & Pharmaceuticals	321.8	331.6	389.5	395.2	423.3	3.0	17.5	8.7
Textile Fabrics	230.2	237.1	347.3	312.2	334.3	3.0	46.5	-3.7
Others	374.3	412.1	654.4	358.7	384.1	10.1	58.8	-41.3
Miscellaneous	117.3	130.5	286.3	10.1	10.9	11.3	119.4	-96.2
Total Imports	8268.9	8253.3	11061.2	10708.339	11467.2	-0.2	34.0	3.7

Source: National Bank of Ethiopia

1.6. Fiscal Developments

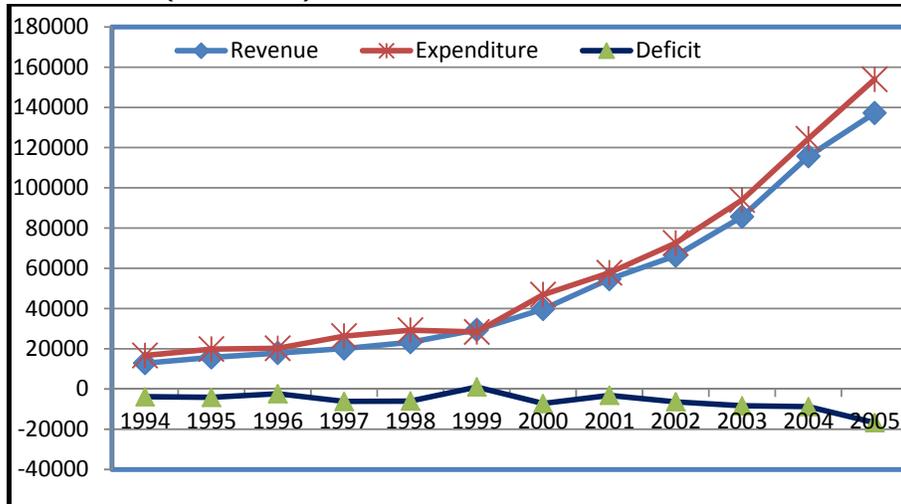
A close look at the trend of Ethiopian fiscal components indicates that the growth rate of domestic tax revenue has been steady over the past decade. A significant amount of domestic tax revenue in Ethiopia comes from direct taxes and import taxes and duties. Over the past decades, these components increased with a steady and high growth rate. As a result, the growth rate of domestic tax revenue has been rapid and stable. On the other hand, the growth rate of non-tax revenue has been uneven. Similarly, external grants have been unsteady injections to the fiscal components of Ethiopia in the past years with their trends significantly influencing the level of Ethiopian budget deficits.

In the last fiscal year, 2012/13, revenues and expenditures of the federal government witnessed some major changes in structure and flows (see Table 1.14). Although significantly less than the previous year's growth (49 percent), total domestic revenue of the federal government increased by 21 percent from the previous year's total revenue level. A significant percentage of this growth came from domestic direct and indirect taxes with growth rates of 26 percent and 39 percents, respectively. Non-tax revenues, on the other hand, have experienced a minor collapse from the previous year's level. This decline in non-tax revenue is due to the decrease in charges and fees and payments and dividends of the state.

The other side of the story, the expenditure, has a similar picture as those of revenue developments. Total expenditure of the federal government has expanded by about 24 percent from its previous year's level. A comparable proportion of this expansion is accounted for by the expansion of the recurrent and capital expenditures. Recurrent expenditures grew by about 22 percent with general services, social services and economic services accounting for the lion's

for share. Similarly, led by social and economic developments, capital expenditures expanded by 25 percent from the previous year's level.

Figure I.16: Trends of Federal Government Revenues and Expenditures (2014-2014)



Source: Computed from CSA data

Due in part to the less than proportionate increase in total revenue than the expansion of total expenditure, the budget deficit with grants stood at more than 16.7 billion Birr in the past fiscal year, up from 8.7 billion Birr in the previous period. This implies that, compared to the previous year, the 2012/13 budget deficit grew by more than 91 percent. This amounts to more than 10 percent of the total revenues and grants earned during the year and more than 2.7 percent of constant market price GDP. This is the highest fiscal deficit for over a decade and is nearly double the previous fiscal year's deficit. The federal government used different financing mechanisms from both domestic and external sources. More than half of the deficit is financed by borrowing from the external sources

and amortization. The balance is financed by borrowing from the domestic sources such as banking and non-banking sectors.

Table 1.14: Federal Government Revenues and Expenditures (In millions of Birr)

Revenue	1999	2000	2001	2002	2003	2004	2005
Tax Revenue	17,354	23,801	29,007	43,318	58,981	85,740	107,010
Direct Taxes	5,168	7,015	9,868	14,906	19,550	28,858	36,393
Domestic Indirect Taxes	3,997	5,092	7,325	10,727	15,705	23,326	32,440
Import Duties and Taxes	8,189	11,693	11,814	17,685	23,726	33,556	38,177
Non-tax Revenue	4,444	5,993	11,176	10,546	10,139	17,124	17,067
Total Revenue	21,797	29,794	40,184	53,864	69,120	102,864	124,077
External Grants	7,583	9,911	14,454	12,376	16,491	12,795	13,115
Total Revenue and Grants	29,381	39,705	54,637	66,240	85,611	115,659	137,192
Expenditures							
Total Recurrent Expenditure	17,165	22,794	27,176	32,537	40,660	51,445	62,746
Total Capital Expenditure	18,398	24,121	30,599	40,061	53,283	72,971	91,183
Total Expenditures	35,563	46,915	57,774	72,598	93,943	124,417	153,929
Deficit Without Grants	(13,766)	(17,121)	(17,591)	(18,734)	(24,823)	(21,553)	(29,851)
Deficit With Grants	(6,182)	(7,210)	(3,137)	(6,358)	(8,332)	(8,758)	(16,736)

Source: Computed from MoFED data

Chapter II

Food Crops Production

2.1. Background

Ethiopia is the second-most populous country in Sub-Saharan Africa with a population of about 92 million (United Nations, 2012, cited by World Bank, 2013). Rain-fed agriculture which employs 80 percent of the population forms the basis of Ethiopia's economy. Agriculture is dominated by subsistence rain fed farming, using few inputs and characterized by low productivity.

Ethiopia has an estimated area of 112 million hectares, of which 65 percent is suitable for some form of agriculture. At present less than 15 percent of this total area is cultivated for the production of major food crops (FAO/WFP, 2012). According to the Central Statistical Agency (CSA) figures, 15.4 million hectares are cultivated by close 13.5 million farmers to produce cereals, pulses, oil seeds and root, stem, tuber and tree crops, including the major export crops of coffee, sesame and sugar cane (CSA, 2013a).

The agricultural sector has been growing consistently over the past decade. Favorable rains, increased use of fertilizer and improved seeds, low impact of pests and diseases and some expansion in cultivated area have contributed to the favorable outturn (CSA, 2013). Following the trend from the previous years, the 2012/13 agricultural year was a good one. This report updates the performance of the agricultural sector in 2012/13 vis-à-vis previous years. This report mainly uses the government (Central Statistical Agency) 2012/13 agricultural sample

survey estimate and 2013/14 crop production forecast³.

2.2. Grain Production

This report which updates the performance of national grain production focuses on small farmers who account for about 96% of grain produced in the country.

The 2012/13 main season crop production was another good year as significant increment both in the estimated cropped land area and volume of grain crops production was reported. The CSA report shows that in 2012/13 grain production increased by 7.41% over the previous crop year (2011/12). During the same period, cultivated land expanded only by about 2.78% which implies a significant improvement in crop productivity (CSA, 2013a).

Based on its post-harvest crop production survey, CSA indicates that in 2012/13 (2005 E.C.) a total land area of about 12,282,929.9812 hectares were covered by the three grain crops (cereals, pulses and oilseeds) and produced about 231,288,472 quintals (see Table 2.1 below).

Compared to the performance of the 2011/12 Meher season, production in 2012/13 exceeded by 5.8% while cultivated land rose by 1.6% implying that most of the gains in production associated with increased productivity rather than expansion in cultivated land.

³ In agricultural statistics the term “forecast” is used to indicate qualitative or quantitative information compiled and released before harvest. It differs from an “estimate” which is always quantitative and compiled during harvest time or afterwards. CSA defines a forecast of crop production can, therefore, be defined as a statement of the most probable production of crop, which is to be obtained (expected) from the coming harvest, based on reasonable expectations of the crop growing conditions that prevail from sowing till the time of harvest (CSA, 2013b).

On the other hand, the 2013/14 (2006 E.C.) forecast indicates that grain area will expand marginally by 0.7% (to 12.37 million hectares) while production is expected to increase significantly by about 10% to 254.2 million quintals (CSA, 2013b).

Table 2.1: Total Area and Production of Grain Crops for Private holdings, 2012/13 (2005 E.C.), Meher Season

	Total Area in Hectare	%	Total Production in Qts.	%
Cereals	9,601,035.26	78.17	196,511,515.46	84.96
Pulses.	1,863,445.42	15.17	27,510,311.88	11.89
Oil Crop	818,449.3	6.66	7,266,644.43	3.14
Grain Crops	12,282,929.98	100	231,288,471.77	100

Source: CSA 2013a.

Out of the estimated 12.3 million ha of grain crop area, cereals constitute about 78.2%. The remaining is shared by pulses (15.2%) and oil seeds (6.6%). *Teff* is the most common cereal crop as it occupies close to one third of the area for cereals. It is followed by maize (20.9%), sorghum (17.8%), wheat (17%) and barely (10.6%). As to production, the data depicts a similar picture as that of the area. Cereals contribute 84.96% (about 196.5 million quintals) of the grain production. Maize, *Teff*, wheat and sorghum take 26.63% (61.6 million quintals), 16.28% (37.7 million quintals), 14.85% (34.3 million quintals) and 15.58% (36.0 million quintals) of the grain production, in that order (CSA, 2013a).

In terms of regional distribution, over 97% of total grain produced in 2012/13 was accounted for by the four major regions – Oromia, Amhara, SNNP and Tigray. While Oromia and Amhara regions accounted for 46% and 36% of grain production, respectively in 2012/13; SNNP and Tigray followed as third and fourth largest producers with contributions of 8.9% and 7.1% in that order.

Farmers in all of these regions, however, cultivate very small holdings. In 2012/13, the average cereal producer cultivated 0.71 ha of farm land for different cereal crops. In terms of individual crops, the average cultivated land varies between 0.22 (in case of maize) and 0.44 ha (*Teff*). As shown in Table 2.2 below, the average cereal producer harvested close to 15 quintals of different cereal crops from the 0.71 ha they allocated.

Table 2.2: Cereal Production in 2012/13

Crop	Number of farmers/holders (million)	Average cultivated farm/holder (ha./holder)	Average production per holder (qt./holder)	Productivity
Maize	9.3	0.22	6.6	30.0
<i>Teff</i>	6.3	0.44	6.0	13.7
Sorghum	4.9	0.35	7.3	20.9
Wheat	4.8	0.36	7.1	19.9
Barely	4.5	0.23	4.0	17.4
Cereals	13.6	0.71	14.5	20.4

Source: CSA 2013b.

The data in Table 2.2 shows that agriculture in Ethiopia is largely subsistence. This is particularly true regarding the major food crops grown in the country which are produced in almost all regions of the country. As very large and diverse country, country-level information as that depicted in Table 2.2 above is believed to diminish. It could also hide the disparity among the different regions either in access to farmlands or volume of production across the regions.

2.3. Pulses and Oilseeds

Unlike cereals, small farmers produce pulses and oilseeds mainly for sale. While pulses are grown in different volumes across the country, production of oilseeds is limited relatively to some suitable areas of the country. Pulses grown in

2012/13 (2005 E.C.) occupied about 15.2 % (1,863,445.42 hectares) of the grain crop area and contributed about 11.9% (about 27,510,311.88 quintals) to the total grain harvested in the same year. About 8.5 million farmers reported that they produced pulses which imply that about 60% of grain producers also allocated part of their farm land to pulse crops. Similar to cereal crops, most of the production is carried out on tiny farm lands. CSA data indicates that in 2012/13 the average pulse crop grower cultivated 0.22 ha to produce 3.3 quintals of different pulses.

Faba beans, haricot beans, and chick peas are the three most common pulses as they were planted on 31%, 20% and 13%, respectively, of the 1.86 million hectares of farm land allocated for production of pulse crops in 2012/13. In terms of production, faba beans, haricot beans and chick peas contributed 34.2% (about 9,439,642 quintals), 16.7% (about 4,630,085 quintals) and 14.9% (4,097,332 quintals), in that order, to the 27.5 million quintals production of pulse crops.

The third crop category under grain crops is oilseeds which are primarily produced for markets. In the 2012/13 crop year, oilseeds added 6.7 % (about 818,449.30 hectares) of grain area and 3.14% (about 7,266,644.43 quintals) to the total national grain production (CSA, 2013a).

2.4. Productivity in Grain Production

Natural resources on the land are the foundation of people's livelihoods. Rural people derive part or their entire livelihood from natural resource-based activities. People try to meet their livelihood by exploiting the natural resources, namely, land, forests and water. However, the natural resource-base of the country is deteriorating due to deforestation (over cutting or over- grazing), soil erosion with its associated loss of fertility and rooting depth, water resource degradation and loss of bio-diversity.

Along with sustainable land management practices, the major tool to counteract the negative impact of land degradation and population growth on poverty, food security and resilience is to raise crop yields and farmers' productivity. The CSA survey also shows a positive trend in grain productivity. As shown in Table 2.3 below, over the past years, yield of cereals, pulses and oilseeds increased by 4.4%, 3.2% and 6.9%, respectively.

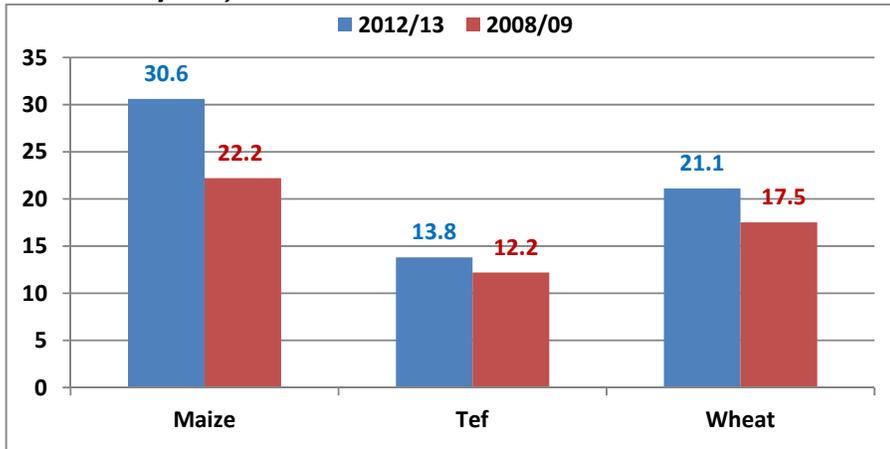
Table 2.3: Comparison of Productivity

Crop category	Productivity (qt./ha)		Growth rate (%)
	2012/13	2011/12	
Grain	18.8	18.1	3.9%
Cereals	20.5	19.6	4.4%
Pulses	14.8	14.3	3.2%
Oilseeds	8.9	8.3	6.9%

Similarly, over the past five years (2008/9 and 2012/13), land productivity (amount of crop harvested per amount of land cultivated) of maize, *Teff* and wheat grew by 38%, 13% and 21%, respectively. These changes in crop yields indicate a corresponding improvement in weather conditions as well as changes in farming practices and use of improved inputs (fertilizer, improved seeds and irrigation).

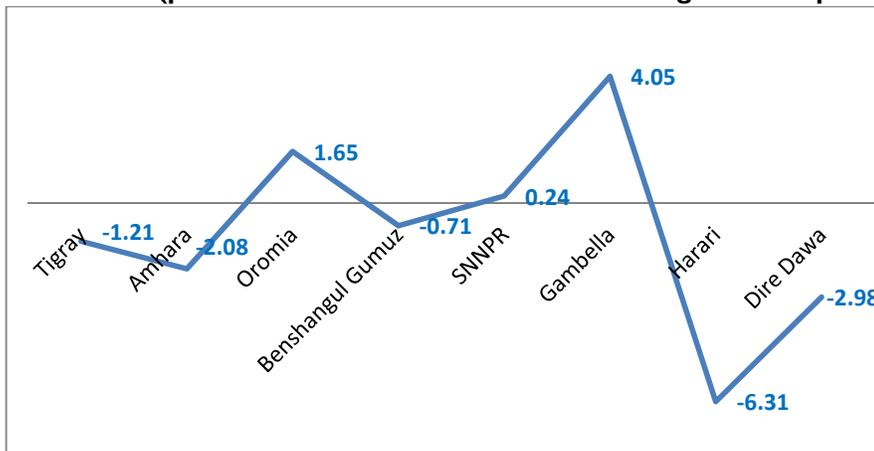
Despite the overall trend of improvement in productivity of grain over time, the performance among different regions varies. In comparison to the national average yield of 18.8 quintal/ha, productivity in many regions like Tigray, Amhara, Benishangul-Gumuz, Harari and Dire Dawa is below the national average, which needs to be improved. Factors that have a negative influence in crop yield like shortage of rainfall and depletion of soil fertility which are expected to be relatively high especially in Tigray and Amhara regions as well as Dire Dawa might explain the relatively low average productivity in these regions.

Figure 2.1: Changes in Yield of Major Cereal Crops (over the past five years)



Source: Computed based on CSA (2013b)

Figure 2.2: Comparison in Grain Productivity among Different Regions (percent difference to the national average of 18.8 qt./ha)

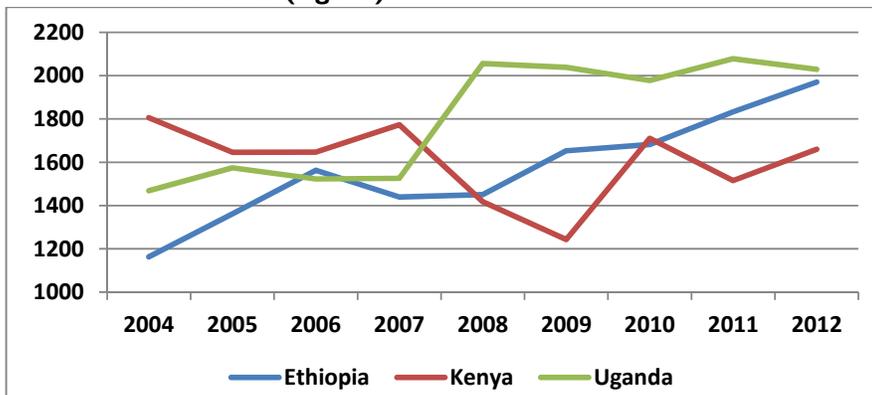


Source: Computed based on CSA (2013b)

Oromia and SNNP regions, where the vast majority of suitable arable land is found and cultivated through rain-fed agriculture, were performing better. Apart from agro-ecological factors, the variation may be attributed to other factors like differences in the use of inputs and farm management as well as the relatively low incidence of major external factors for the above-average performance in these regions.

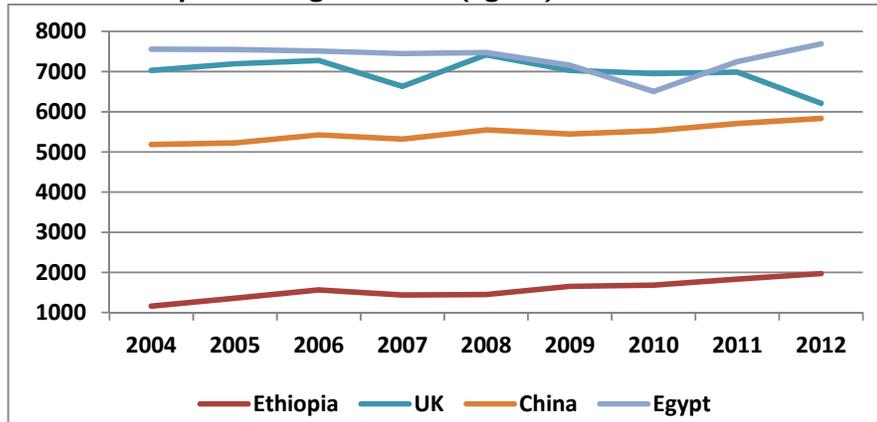
Despite such regional differences productivity in grain production has been improved even in comparison with neighboring countries like Kenya and Uganda. Between 2004 and 2012, cereals yield in Ethiopia increased 69% to reach 1970 kg/ha in 2012. During the same period, cereals yield in Uganda grew by 38%, while it is stagnated or declined marginally in Kenya. As shown in Figure 2.3, land productivity in cereals production in Ethiopia has been growing very fast and consistently (especially since 2007) and now exceeds the level achieved in many sub-Saharan Africa. This, however, does not mean that it is comparable to that of the international level. As shown in Figure 2.4 below, land productivity in Egypt, UK and China which are found at different levels of development, exceeds the performance in Ethiopia by 3 to 4 times.

Figure 2.3: Comparison of Cereals Yield – Ethiopia versus Neighboring Countries (Kg./ha)



Source: Computed based on Data from World Bank’s World Development Indicators. <http://databank.worldbank.org/data/views/reports/tableview.aspx> (accessed on 4th April 2014).

Figure 2.4: Comparison of Cereals Yield – Ethiopia versus best performing countries (kg./ha)



Source: Computed based on Data from World Bank's World Development Indicators. <http://databank.worldbank.org/data/views/reports/tableview.aspx> (accessed on 4th April 2014).

2.5. Use of Improved Inputs

A range of factors are expected to have a positive impact on grain production and productivity. Apart from weather conditions, farmers' participation in government extension program/package, use of irrigation, improved seeds and fertilizers as well as efficiency of output markets in transmitting the bulk share of consumers' prices are key factors. In the following section, each of these variables is discussed briefly.

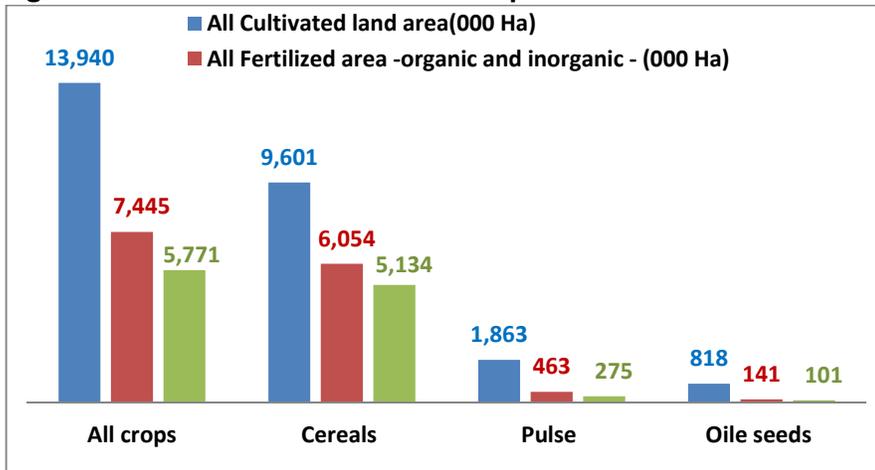
2.5.1. Extension Package

The number of holders participating in various crop extension packages was estimated to be greater than 5 million (CSA, 2013b), which indicates that farm plots of close to 40% of Ethiopian smallholders was under the extension package in 2012 crop year. A CSA report shows that most of the area under the

extension program was under maize, *Teff* and wheat crops. The report shows that the extension package embraced about 3 million maize growers, more than 1.6 million *Teff* growers and more than 1.4 wheat growers, who cultivated more than 847 thousand hectares, about 665 thousand hectares and more than 498 thousand hectares, respectively.

In addition to farmers under the extension package, the extension program provided credit and advisory services to about 3.4 and 11 million farmers, respectively.

Figure 2.5: Fertilizer use in 2012/13 Crop Year



Source: Computed based on data from CSA (2013a)

2.5.2. Fertilizer Use

Ethiopian agriculture is characterized by smallholder production with decreasing arable land and therefore the need to raise productivity. The application of inorganic fertilizer is key to augment yield and to counteract the negative effect of soil erosion and nutrient depletion. The application of fertilizer to crop fields

in Ethiopia has a long history but gathered momentum over the past decade. A recent report by the International Fertilizer Development Center (IFDC), for instance, indicates that fertilizer sales and consumption have increased by more than 100 percent between 2002 and 2011, with an average rate of 6 percent per year (IFDC, 2012).

CSA reports indicate that in 2012/13 crop year about 11.3 million farmers or 75% of Ethiopian smallholders applied inorganic/synthetic fertilizers. Compared to the 2011/12 and 2010/11 crop years, access to inorganic fertilizers in 2012/13 increased by 16% and 31%, respectively.

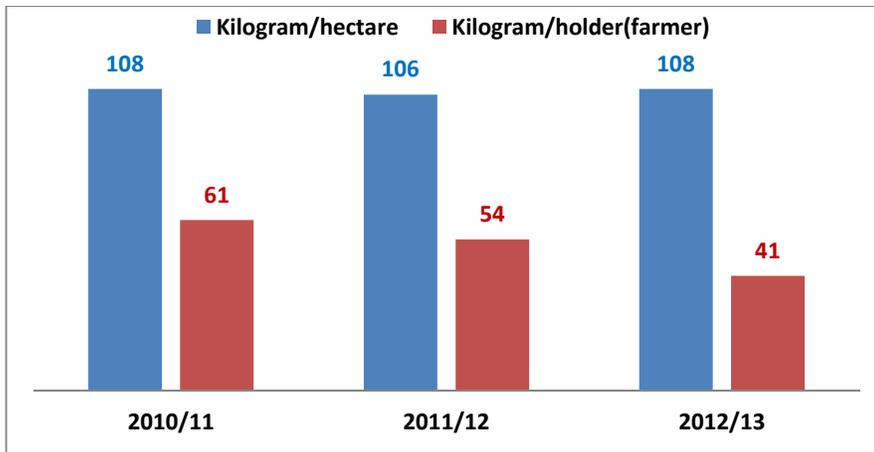
The volume of the use of inorganic fertilizers and the extent of area under fertilizers are also increasing in the country. The amount of inorganic fertilizer applied to area under crops was estimated to be more than 6.2 million quintals for private peasant holders during the survey year 2012/13 (CSA, 2013a). A little above half of the total cultivated land was fertilized either using organic or inorganic/synthetic fertilisers. Of all areas cultivated by cereals, pulses and oilseeds 53%, 25% and 12%, respectively, were treated with inorganic or synthetic fertilizers in 2012/13 (CSA, 2013a).

The total fertilized cultivated land was 7,444,654 hectares, of which 5,770,799 hectares were fertilized by inorganic or synthetic fertilizers that accounted for about 77% of the total fertilized land area (Figure 2.6). Similar to the previous years, of all the volume of fertilizers used 4.3 million quintals was that of a mixture of UREA and DAP and 1.7 million was that of DAP.

Most of the fertilizer used was applied to *Teff* (nearly 1.8 million quintals), wheat (about 1.5 thousand quintals) and maize (nearly 1.4 million quintals). The largest area to which fertilizer was applied was that of *Teff* (more than 2 million hectares) followed by maize (about 1.4 million hectares) and wheat (about 1.3 thousand hectares) (CSA, 2013a).

Despite the increase in number of fertilizer users, extent and intensity of fertilizer use are, however, far from those recommended. In the 2012/13 crop year, for instance, the application rate was 108 kilogram per hectare and 41 kilograms per holder (farmer) (see Figure 2.6). Compared to the previous years, the application rate remains stagnant, while use per household decreased consequently from around 61 kilograms per holder (farmer) in 2010/11 to 41 kilogram in 2012/13.

Figure 2.6: Intensity of Inorganic/Synthetic Fertilizer Use in Recent Years



Source: Computed based on data from CSA (2013a)

Current use of fertilizers is in general low even to the government’s own plan. A study by the African Fertilizer and Agribusiness Partnership, for instance, estimates that Ethiopia must essentially double its consumption to 1.2 million metric tons (mt) of fertilizer products to meet the GTP targets (IFDC, 2012). In addition to supply problems, farmers have limited a choice to select and access the type of fertilizer that best fit their condition.

The current consumption of mostly diammonium phosphate (DAP) and urea fertilizers provides a limited set of products to smallholders who face heterogeneous agro-ecological conditions and cultivate a variety of crops that need a more varied set of technologies. Though not all products may be imported at attractive prices, establishing domestic blending facilities may offer options that target farmers' local conditions (IFDC, 2012).

To ease the supply problem, the Ethiopian government is in the process of setting up fertilizer plants. In the meantime it is important to deal with existing constraints that include bottlenecks in the procurement arrangements, macro- and micro-economic environment, infrastructure and logistics, research and extension services, agro-dealer capacity and training of farmers and financing issues.

2.5.3. Improved Seeds

Improved seeds are important inputs in terms of increasing agricultural productivity. They also play a central role in rising and optimizing the benefits associated with the use of fertilisers. The use of improved seeds in Ethiopia, however, is very low. From the total annual seed requirement of the agricultural sector in Ethiopia estimated at about 700 000 tonnes (FAO/WFP, 2012), the total volume of improved seeds used in 2012/13 (2005 E.C) was estimated to be more than 342 thousand quintals (CSA, 2013a).

Compared to the 5.8 million hectares of areas treated with inorganic fertilisers, the crop area where improved seeds were applied was estimated to be around 832 thousand hectares (CSA, 2013a), which is close to 7% of the total area cultivated for grain crops (cereals, pulses and oilseeds). Compared to the preceding year (2011/12), the use of improved seeds in 2012/13 was reduced significantly, by 29% in amount but only by 5% in area applied.

Wheat and maize accounted for about 90% of improved seeds use in the 2012/13 crop year. Of the total amount of 342 thousand quintals of improved seeds applied in the 2012/13 crop year, wheat and maize accounted for close to 50% (or 172 thousand quintals) and 38% (or 129 thousand quintals), respectively.

Many factors could contribute for the low use of improved seeds. Shortage of improved seeds, however, is not always associated for the low use of improved seeds in the country. A report by FAO/WFP, for instance, indicates that over a thousand tonnes of a long season maize variety was unsold in 2011/12 crop year while demand for pulse seeds, improved rust tolerant wheat seed varieties and short season hybrid maize was reported unmet during the same year (FAO/WFP, 2012).

Table 2.4: Pesticide Applied and Irrigated Cultivated Land during 2012/13 Main Crop Season (Private Small Holdings, Main Season, 2012/13)

Crop type	Pesticide applied Ha ('000)	percentage share	Irrigated land Ha ('000)	percentage share
All crops (grain)	2,772	100		152
Teff	1,116	40%	6	4%
Barley	245	9%	3	2%
Wheat	846	31%	6	4%
Maize	110	4%	28	18%
Sorghum	164	6%	18	12%

Source: CSA (2013). Figures are rounded to their nearest thousand. *

The seed market is dominated by the informal sector. During the 2011/12 crop year, for instance, only about 15 percent was met by the formal sector which comprises the Ethiopian Seed Enterprise (ESE), multinational seed companies, regional seed enterprises, cooperative unions and approximately 35 private producers (FAO/WFP, 2012).

2.5.4. Pesticide Applied Area

Pesticides are not commonly applied on food crops plots in Ethiopia. But at times when rampant pests and weeds damage crops the using pesticides becomes indispensable. In the 2012/13 crop year, pesticide was applied on about 2.7 million hectares of cropland was applied to prevent or minimise crop damages caused by pests and weeds. Most of the crop area to which pesticide was applied was under *Teff* (about 1.1 million hectares) and wheat (more than 846 thousand hectares) (Table 2.4).

In terms the number of holders, a CSA report shows that a little over 4.4 million farmers or one for every three farmers applied pesticides in 2012/13 crop year.

2.5.5. Irrigation

Irrigation is important in improving productivity of farmers since it enables to increase the frequency of crop production and alleviates water shortage caused by poor rains /dry seasons. But because of constraints like capital and technical know-how only a small number of farmers irrigated their farms.

CSA data shows that the total irrigated land for the year 2012/13 (2005 E.C.) was more than 151 thousand hectares (CSA, 2013a), which is very low when compared to the over 12 million hectares cultivated for grains production or to the abundant water sources and irrigation potential the country has. It is also important to notice that, for economic reasons, small farmers also prefer to irrigate farms of high value crops like vegetables and fruits (to grains).

Moreover, the CSA report seems to exclude irrigation areas under equipped irrigation schemes and communal flood irrigation. The 2012 FAO and WFP report on crop and food security assessment says that about 640 000 ha are

estimated to be under equipped irrigation schemes, and an estimated 400 000 to 500 000 hectares under communal flood irrigation (FAO/WFP, 2012). Still, despite recent increases in the area of land irrigated by any farm, the nation's annual harvests overwhelmingly depend on the quantity, timeliness and equitable distribution of the rainfall, which normally occurs in two distinct rainy seasons, the *belg* and the *meher* seasons.

The farmers who practice irrigation are estimated to be more than one million. Most of the irrigated area was under maize, sorghum and *Teff* estimated to be more than 28 thousand hectares for maize, 18 thousand for sorghum and 6 thousand hectares for *Teff* (Table 2.4).

2.6. Food Security

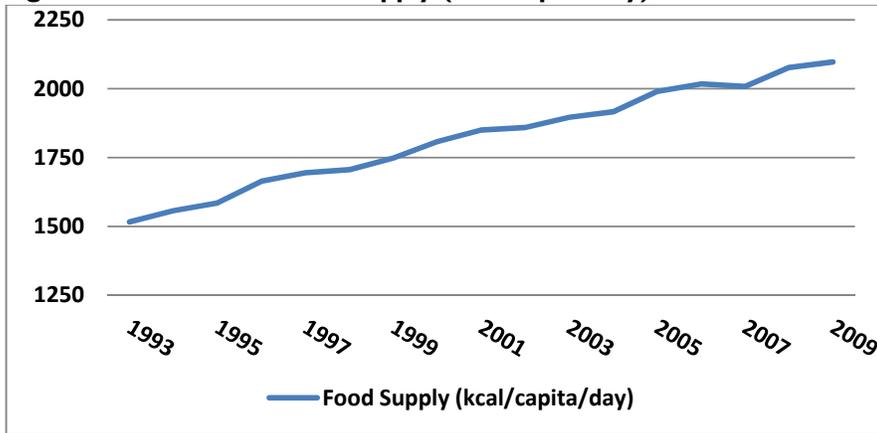
Since 2007, Ethiopia has achieved strong economic growth, making it one of the highest performing economies in Sub-Saharan Africa. Yet it remains one of the world's least developed countries. Ethiopia is one of many African countries deeply affected by food insecurity. Estimates of the portion of Ethiopia's population without secure access to food exceed 3 million in some seasons. This means that in a given year, almost 1 in 10 Ethiopians struggle to have access to sufficient, safe and nutritious food, (Khalid and Dan, 2014). The annual FAO/WFP Crop and Food Security Assessment Mission report, however, reveals a higher level of food insecurity in the country. As it also distinguishes the chronic food insecure population from the temporary or acute food insecure population, it provides a more comprehensive report on the status of food insecurity in Ethiopia. According to the 2012/13 report, for instance, an estimated 7.6 million (or 11 percent of the rural population) are considered chronically food insecure, meaning each year they rely on resource transfers to meet their minimal food requirements. In addition, over the past four years, between 2.2 and 6.4 million additional people were food-insecure or not able to meet their food needs in the

short term due to transitional factors. In 2012, for instance, the number of people in need of food assistance was projected at 3.24 million, which reflects a 29 percent decrease compared to the second half of 2011 (FAO/WFP, 2012).

Despite this relatively high number of people in need of food assistance, the country has made significant progress in reducing the prevalence of malnutrition and food insecurity over the last decade. FAO, for instance, shows that the national food supply has increased by 38% from 1516 Kcal/capita/day in 1993 to 2097 Kcal/capita/day in 2009 (see Figure 2.7). Though this data from FAO food balance sheet on Ethiopia includes food supply both from domestic sources (own production) and foreign sources (commercial import and food aid), the progress the country made to achieve its food security is commendable⁴.

In general, the rapid economic growth combined with investments in rural infrastructure and establishment of the national safety net program has led to a reduction in the prevalence of malnutrition and food insecurity over the last decade. The PSNP, for instance, helped households to smooth their consumption by bridging periodical food gaps and eventually reduce food insecurity (IFPRI, 2013). The provision of multi-annual predictable transfers, as food, cash or a combination of both, helped chronically food insecure people to meet their basic food requirements, survive food deficit periods, and avoid the depletion of their productive assets.

⁴ As shown below (in Figures 2.7 and 2.8), import of cereals, which has been increased by over four times over the past twenty years, has contributed a lot for this reported improvement in the national food supply.

Figure 2.7: Trends in Food Supply (kcal/capita/day)

Source: Computed based on data from FAO Statistics on Food supply
<http://faostat3.fao.org/faostat-gateway/go/to/browse/FB/FB/E>

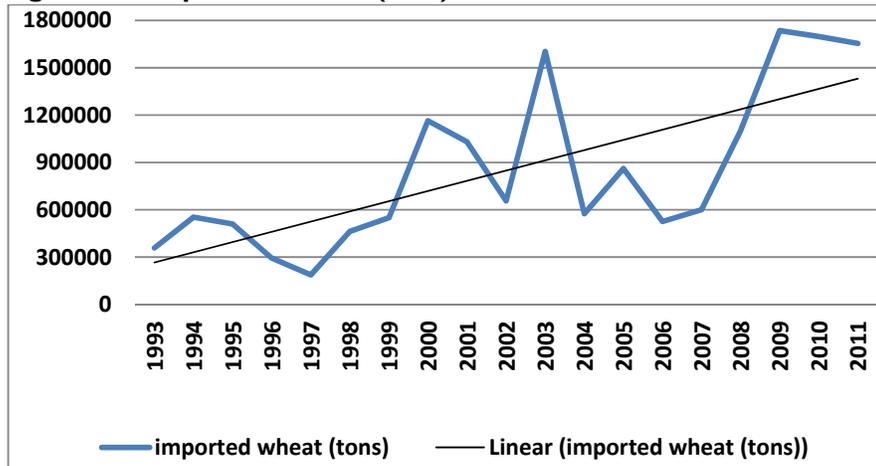
In addition to food production and development programs like the PSNP, food markets play an important role for many households in Ethiopia to access food and sell surplus. Based on the HEA baseline studies, it was estimated that about 48 percent of rural households are net-buyers. The western half of the country and south-central Oromia are generally a surplus area, while pastoral areas but also parts of the north-east, east and central cropping areas in the central highlights are generally deficit areas. In case of rising food prices, urban households and net-buying households in rural areas are particularly vulnerable (FAO/WFP, 2012).

2.7. Import of Food Crops

As wheat accounted for close 85% of Ethiopia's food crop import during the past twenty years, this update report on import of food crops is focuses on wheat. According to a joint report by FAO and WFP, commercial imports of cereals,

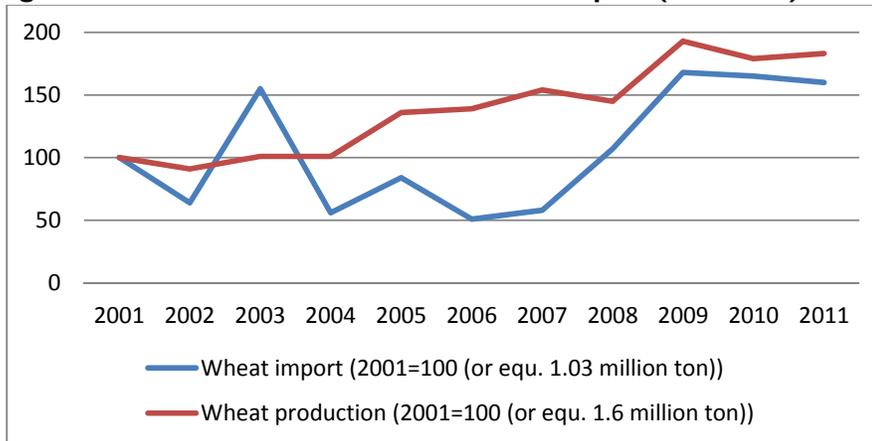
mainly wheat, have risen strongly since 2008, showing the Government’s effort to stabilise prices following the significant increase in domestic food prices. From 2008 and 2011, between 500 000 and 790 000 tonnes of wheat per year were commercially imported, representing about half of the total imported wheat (that includes wheat imported as food aid) (FAO and WFP, 2012)⁵. As shown in Figure 2.8 below, on average the country imported about 1.55 million tons of wheat every year between 2008 and 2011. The country’s dependence on imported wheat has also been growing over time (see the trend line). Over the past 18 years, import of wheat grew on average by 3.6% every year, as it irrigated from a little over 350,000 tons in 1993 to 1.65 million tons in 2011.

Figure 2.8: Import of Wheat (tons)



Source: Computed based on data from FAO Statistics on Food trade

⁵ Import of other food crops is, however, very small. Maize imports, for instance, ranges in volume between 30 000 to 82 000 tonnes in the last five years, and is mainly in the form of food aid. Food aid imports of sorghum have always been negligible, except between 2008 and 2010 when they reached high levels of between 190 000 and 250 000 tons (FAO and WFP, 2012).

Figure 2.9: Trend in Wheat Production and Import (2001=100)

Source: Computed based on data from FAO Statistics on Food trade

Wheat import has been growing for most of the years at par with wheat production. Since 2008, however, the growth of wheat import has been very high. As shown in Figure 2.9, production grew by 83% between 2001 and 2011, while wheat import (both as commercial and food aid) grew by 60% during the same period. However, for the last five years (between 2007 and 2011), wheat import grew very rapidly and doubled (or grew by 100%), while growth in wheat production during this period was only one third of the growth reported in wheat import.

Overall, the country needs to double its food production to reduce its dependence on food imports. Though the country has achieved strong economic growth, which makes it one of the highest performing economies in Sub-Saharan Africa, the growing dependence on imported wheat will threaten this growth as well as food security of its population. The country, therefore, needs to improve land productivity on existing farmlands and expand production of food crops to new potential farmlands which are reported to be abundant in the country.

2.8. Production of Vegetables, Root and Permanent Crops

CSA's latest report shows that during 2012/13 crop year a total of 1,888,756 hectares of land were covered by vegetables, root crops and permanent crops both in small holder farmers and commercial farms. The total crop output from these crops was 149,112,562 quintals (CSA, 2013a).

Vegetables are not common in Ethiopia. They took up about 1.43 % of the area under all crops at national level. Red peppers and Ethiopian Cabbage occupied close to 90% of all areas planted with vegetable crops with shares of 71% and 18%, respectively. In terms of production, vegetables contributed close to 3% to the total crop production; again red peppers and Ethiopian cabbage contributed the lion's share of production of vegetables, with shares of 37% and 44%, respectively (CSA, 2013b).

2.8.1. Root Crops

Root crops covered more than 1.51% of the area under all crops and contributed 12.58% to the production of all crops in the country. After cereals, which constitute about 79% of cultivated area, root crops follow distantly as the second most common crop. Root Crops include onions and garlic that are indispensable to improve the taste and scent food and others like potatoes, sweet potatoes and Taro/Godere which are among the list of major food crops that are consumed across the country. Potatoes, Sweet potatoes and Taro ('Godere') occupied about 37%, 21% and 20% of the area of root crop production, respectively. The same crops contributed 24 %, 33 % and 31%, in that order, to the root crop production. (CSA, 2013b).

2.8.2. Fruit Crops

Fruits are not common both in terms of consumption and production in Ethiopia. With 61,973 hectare of planted area, fruits have a share of 1.64% of the area under major food crops cultivated in the country in 2012/13 crop year. Bananas contributed about 58% of the fruit crop area followed by mangoes that contributed 14%. More than 4,793,360.64 quintals of fruits were produced in the country. Bananas, papayas, mangoes and oranges took up 63%, 8%, 15% and 7% of the fruit production, respectively.

2.8.3. Stimulant Crops

Coffee and Chat are key stimulant crops widely grown in Ethiopia. As major crops with huge economic implications both for producers and the country, production of these crops in general and Chat in particular has been growing over the past decade. In 2012/13 crop year, Chat and Coffee accounted for 1.29% and 3.92%, respectively, of the area under all crops in the country and 1,589,480.99 and 2,755,298.73 quintals of produce, in that order, were obtained from these crops in the same agricultural year. (CSA, 2013b)

2.9. Livestock Production

Ethiopia is believed to have the largest livestock population in Africa. Based on its 2011/12 Annual Livestock Sample Survey which covered the rural agricultural population in all the regions of the country except the non-sedentary population of three zones of Afar and six zones of Somali regions, CSA estimates that the country has close to 50 million cattle, 40 million sheep and goats, as well as close to 10 million donkeys, horses, mules and camels⁶.

⁶ The number of livestock and its products shown in all tables do not include large scale dairy farms, fattening, etc. owned by investors, cooperatives and other institutions. It also excludes urban area livestock numbers and its products.

Livestock plays an important role in the Ethiopian economy. Through export of live animals, and leather and leather products (and until recently thorough export of hides and skins) livestock is among the major source of foreign exchange earnings for the country. For Small farmers, livestock provides draught power for the cultivation of their small holdings and for crop threshing virtually all over the country. It is also an essential mode of transport for farmers as well as their products to the market places. Livestock plays other important roles for small farmers as it provides some degree of security since it is 'near liquid asset', and manure to fertilize farmlands.

It is eminent that livestock products and by-products in the form of meat, milk, honey, eggs, cheese, and butter supply etc. provide the needed animal protein that contributes to the improvement of the nutritional status of the people.

Using various techniques, CSA also estimates livestock products and by-products the country produces in the form of meat, milk, honey, eggs, cheese, and butter supply etc. The latest survey shows that Ethiopia produces 3,805 and 165 million liters of cow and camel milk from the smallholder sector in 2012/13 agricultural year. Compared to the preceding year, production of cow milk grew by 14% while camel milk declined by about 7%.

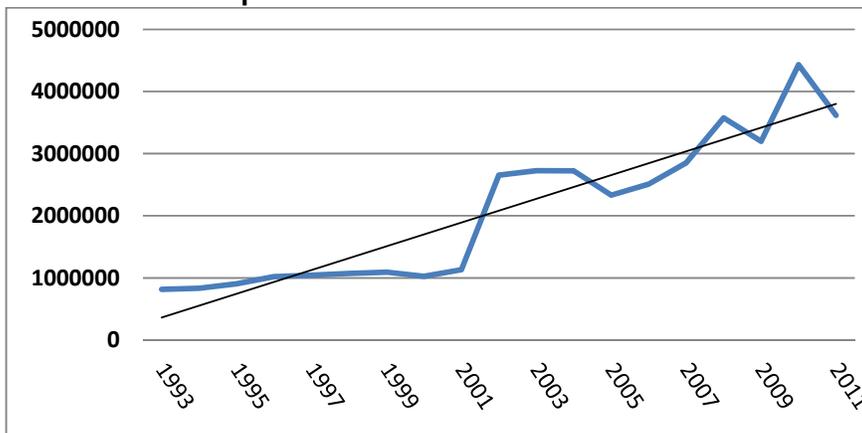
Table 2.5: Estimated Milk, Egg and Honey Produced by Small Farmers

Livestock Products	Production year		Change (%)
	2012/13	2011/12	
Cow milk (million liters)	3,805	3,330	14%
Camel milk (million liters)	165	176	-7%
Honey (million Kg.)	46	40	15%
Egg (million)	93	95	-2%

Source: CSA (2013c).

FAO statistics also shows that milk production has been growing over the past two decade, especially since 2001⁷. As shown in Figure 2.10 below that the country has managed to triple its milk production over the past fifteen years alone. This is very encouraging, but not sufficient in view of the potential the country has, the high population increase, and the rapid economic growth the country achieved over the past decade.

Figure 2.10: Trend in Milk Production over the Past Two Decades in Ethiopia



Source: Computed based on data from FAO Statistics on Livestock Production. <http://faostat3.fao.org/faostat-gateway>

⁷ Most of the growth in milk production was reported in 2001 and 2003. Milk production in these two years alone grew by over 150%. Though FAO statistics explains this growth in total milk production to corresponding improvement in yield (changes in production per cow), this study could not able to find the specific factors that explain or contributed to this very high growth or growth trajectory in yield as well as production between 2001 and 2003.

Chapter III

Performance of the Manufacturing Industry

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3.1. Introduction

This chapter assesses the recent performance of Large and Medium Scale Manufacturing Industries (LMSMI) in the first two GTP implementation years. To that end, it compares the recent performance against the base-year (2009/10), PASDEP period average, and SDPRP end-year performance. Of the overall industry, the report focuses on strategic sub-sectors including food, textile, leather and chemical. The report also attempts to review economic transformation, technological changes, the Science and Technology (S & T) policy and strategy in the manufacturing industry and its implementation.

3.2. Performance during the First Two GTP Implementation Years

3.2.1. Manufacturing⁸ Industry's GDP Growth

The Ethiopian economy has registered an average double digit growth per annum over the last decade. In an attempt to sustain this remarkable growth during the PASDEP period, the government issued the Growth and Transformation Plan (GTP), which is now in its 4th implementation year. During the first three GTP implementation years, real GDP registered, an average annual growth of 10

⁸ The report is based on both public and private industries in the country which engage ten persons and more and use power-driven machinery. Manufacturing industries/enterprises which engaged ten persons and more and used power-driven machinery all over the country were entirely enumerated and data acquired.

percent which is slightly less than the average annual growth attained during the PASDEP period (11.02 percent) and during the SDPRP end-year (12.6 percent). The decline observed in the growth of real GDP may entail the difficulty of sustaining a high growth rate (or extending **the recent growth spell**).

The registered growth differs from one sector to the other. During the first three GTP implementation years, the industry sector registered, an average annual growth rate which is higher than the preceding years while agriculture and service sectors registered a lower growth rate indicating a slight structural transformation towards industry.

The industry sector constitutes mining and quarrying, manufacturing, construction, electricity and water. Of these sub-sectors, construction has contributed the lion's share to the total growth, and manufacturing the lowest. Of the manufacturing sub-sectors, large and medium scale industries have contributed more to the total growth registered than small and cottage industries.

During the first three GTP implementation years, LMSMI's GDP registered an average annual growth of 14.8 percent which is higher than the 11.9 percent average annual growth witnessed for the PASDEP period. Small and cottage industries registered an average growth rate of 4.8 percent per annum during the same period which is lower than the registered average growth rate of 7 percent per annum during the PASDEP period.

Despite due focus given to the large, medium and small scale manufacturing industries in the GTP, the performance registered so far is unsatisfactory suggesting that the dire need for examining the sector's growth constraining factors that hamper it from playing a leading role. Towards this end, the government has provided attractive incentive packages for investment in the manufacturing sector. However, a significant size of investment has not been

PERFORMANCE OF THE MANUFACTURING INDUSTRY

flowing into the sector as expected mainly due to the existence of other highly and rapidly rewarding businesses against longer payback periods of investment in industry, etc (Table 3.1).

Table 3.1: GDP by major sectors, real growth in %

Industry\Year	2004/05	2005/06	2006/07	2007/08	2008/09	Base year, 2009/10	PASDEP, period average	2010/11	2011/12	2012/13	GTP 3-Year Average
Agriculture	13.5	10.9	9.4	7.5	6.4	7.6	8.36	9	4.9	7.1	7.0
Industry	9.4	10.2	9.5	10.1	9.7	10.8	10.06	15	17.1	18.5	16.9
Manufacturing	12.8	10.6	8.3	10.3	9.1	11.6	9.98	12.1	11.8	10.8	11.6
Large and Medium Scale Manufacturing	11.6	13.7	9.5	12.6	10.3	13.6	11.94	14.1	15.9	14.5	14.8
Small Scale and Cottage Industries	15	4.9	6	5.6	6.4	7	5.98	7.2	4.2	3	4.8
Services	12.8	13.3	15.3	16	14	13.2	14.36	12.5	10.6	9.9	11.0
GVA at Constant Basic Prices	12.6	11.5	11.8	11.2	10	10.6	11.02	11.4	8.8	9.7	10.0

Source: MoFED

3.2.2. The Structure of the Economy

The GTP has planned to shift the economy from a predominantly traditional agriculture-based to a modern industry-based economy. Within the manufacturing sector, priority sub-sectors were identified to spear head the development of the sector and the overall economy. Examination of the structure of an economy (measured in terms of the shares of sectors in GDP,

employment, export, etc) could hint at the direction the economic transformation is taking.

Agriculture, industry and service sectors accounted for about 52.6 percent, 10.7 percent and 38 percent, respectively, in 2004/05. Manufacturing, LMSMI and small and cottage industries accounted for about 4 percent, 2.5 percent and 1.6 percent, respectively, during the same year. The current share of the industry sector in the total economy has shown no significant difference from the level registered before 8 years. Rather, the shift was made from agriculture to service sector in terms of the share in GDP giving rise to the realization of an unplanned transformation, i.e., service -led growth (Table 3.2).

Table 3.2: Distribution of GDP by sector, Share in %

Industry\Year	2004/05	2005/06	2006/07	2007/08	2008/09	Base year, 2009/10	PASDEP, period average	2010/11	2011/12	2012/13	GTP 3-Year Average
Agriculture	52.6	52.3	51.2	49.5	47.8	46.5	49.46	45.6	43.9	42.9	44.1
Industry	10.7	10.6	10.4	10.3	10.2	10.3	10.36	10.7	11.5	12.4	11.5
Manufacturing	4.0	4.0	3.9	3.8	3.8	3.8	3.9	3.9	4.2	4.2	4.1
Large and Medium Scale Manufacturing	2.5	2.5	2.5	2.5	2.5	2.6	2.5	2.6	2.8	2.9	2.8
Small Scale and Cottage Industries	1.6	1.5	1.4	1.4	1.3	1.3	1.4	1.2	1.4	1.3	1.3
Services	38	38.6	39.8	41.6	43.1	44.1	41.44	44.4	45.1	45.2	44.9

Source: MoFED

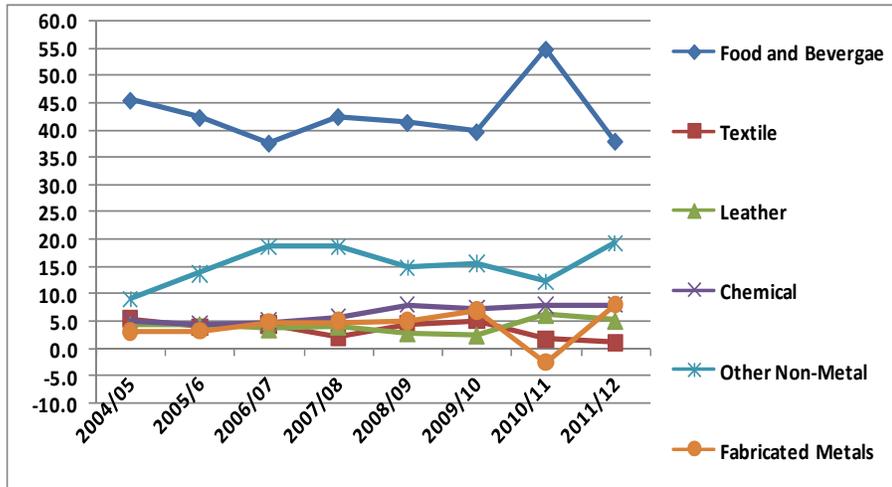
3.2.3. Structure of the Manufacturing Industry

Despite the issuance of industrial development strategies, GTP and revision of investment code, there is no vivid structural change so far. When change occurs,

it is short lived indicating the change underpinning factor to be transitory shocks rather than policy induced.

The structure of large and medium scale manufacturing sectors remained dominated by consumer goods production for long. The food and beverage sub-sector has accounted, on average, for about 2/5th of the industry total for over three decades. The share of the sub-sector declined to 37 percent in 2011/12. The shares of the non-metallic minerals (cement constitutes the major component) and fabricated metals sub-sectors increased during the same year mainly due to the construction sector boom. The share of export-focused sub-sectors declined during the first two GTP implementation years indicating lower performance compared with sub-sectors focusing mainly on the production of import substituting goods (Figure 3.1).

Figure 3.1: The Structure of Manufacturing Industries, share in %



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.4. Scale, Employment and Wages

3.2.4.1 The Scale

The scale with which a firm operates determines its degree of competitiveness in the market. Large scale enterprises have greater cost advantages to smaller ones, *ceteris paribus*. The share of large scale manufacturing industries (enterprises which engage 50 persons and above) in the total industry decreased from 34 percent in 2009/10 to 32.9 percent in 2011/12 depicting the dominance of medium scale industries. The reduction could be explained by increased entry of new medium sized firms, closing down/contraction of existing large scale enterprises, all giving rise to erosion in the scale advantage that the sector can reap.

The scale of manufacturing industries varies by ownership structure. Public owned manufacturing industries are mainly large scale while privately owned are mostly medium scale. The share of large scale industries significantly decreased from 84.1 percent in 2009/10 to 75 percent during the second GTP implementation year.

The share of large scale industries in sub-sectors varies from year to year mainly due to the government's privatization of relatively higher number of medium scale manufacturing industries compared with large scale ones. For instance, the share of large scale industries in the rubber and plastic sub-sector which was about 55.6 percent in 2009/10 became 100 percent large scale in 2010/11 (Table 3.3).

Table 3.3: Enterprises with 50 persons and above, share in %

	2009/10		2010/11		2011/12	
	Industry, total	Public	Industry, total	Public	Industry, total	Public
Food & Beverages	40.2	83.9	39.1	90.0	34.1	73.9
Tobacco	100.0	100.0	100.0	100.0	100.0	100.0
Textiles	90.0	100.0	78.4	100.0	76.9	100.0
Wearing Apparel	47.1	-	42.5	100.0	59.0	100.0
Leather	50.9	75.0	56.7	66.7	53.4	66.7
Wood	37.0	86.7	33.7	76.7	37.1	68.4
Paper	42.3	100.0	49.2	92.9	47.5	100.0
Chemicals	57.3	88.9	61.0	100.0	64.6	100.0
Rubber & Plastic	48.9	55.6	53.8	100.0	54.8	100.0
Non-Metallic Mineral	16.4	85.0	15.2	90.0	21.7	64.3
Basic Iron & Steel	43.6	100.0	48.7	75.0	74.1	100.0
Fabricated Metals, except Machinery & Equipment	29.9	82.4	27.7	100.0	18.3	83.3
Machinery & Equipment	46.7	-	66.7	100.0		-
Motor Vehicles	63.6	100.0	62.5	100.0	75.0	-
Furniture NEC	13.9	70.0	11.1	33.3	11.5	42.9
Total	34.0	84.1	34.4	86.0	32.9	75.0

Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.4.2 Employment

Employment generation is a key factor in the promotion of the development of the manufacturing industry. Transformation towards industrialization entails increased share of employment, value added, export earnings, etc of the manufacturing sector in the economy. However, employment in the large and medium scale manufacturing industries on average, declined during the first two GTP implementation years compared with the base-year. In the face of the growing population and graduates from universities, the performance so far is unsatisfactory. The performance of food and beverage and the chemical sub-sectors is very poor. During the GTP

implementation period, capital and intermediate goods producing sub-sectors receive high attention owing to their intra-industry linkages strengthening role. However, they lost significant employment during the first two GTP implementation years. Textile and leather sub-sectors, on the other, gained significant employment during the same period (Table 3.4).

Table 3.4: Employment, Growth in %

Sub-sectors	SDPRP	PASDEP Period					GTP period			
	end year									
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	period average	2010/11	2011/12	First two-year average
Food & Beverages	1.07	12.52	0.07	15.63	8.95	33.71	14.18	11.58	-25.23	-6.83
Tobacco	-11.21	8.32	5.83	56.95	-10.53	-12.12	9.69	36.11	-0.30	17.90
Textile	-9.60	6.76	-1.80	-51.11	55.19	29.86	7.78	-37.19	121.92	42.37
Wearing Apparel	-31.53	57.29	85.51	0.12	2.36	19.88	33.03	-37.89	95.57	28.84
Leather	3.24	0.01	5.52	2.81	1.91	22.37	6.52	30.93	1.13	16.03
Wood	-3.28	12.54	14.27	57.51	-33.32	54.48	21.10	0.78	-17.13	-8.17
Paper & Printing	8.17	7.35	1.27	9.26	-1.07	13.33	6.03	0.78	-17.20	-8.21
Chemicals	17.83	-5.14	24.03	10.41	3.47	39.27	14.41	-12.88	11.92	-0.48
Rubber & Plastic	28.64	21.61	10.44	14.54	37.02	15.90	19.90	-20.74	17.08	-1.83
Non-Metalic Mineral	-1.00	11.56	10.34	51.32	17.43	-1.56	17.82	-11.56	20.24	4.34
Basic Iron & Steel	5.57	20.43	-9.38	-30.94	28.77	134.85	28.75	22.68	-43.33	-10.32
Fabricated metals, Except Machinery & Equipment	10.86	51.41	-39.32	47.28	13.59	69.56	28.51	-93.51	25.36	-34.07
Machinery & Equipment	-13.67	81.00	-57.25	8.19	-8.11	405.29	85.82	-24.56	-93.83	-59.20
Motor Vehicles	9.03	18.18	115.04	-44.91	-2.38	-0.77	17.03	-2.87	3.02	0.07
Furniture, NEC	69.45	-34.86	0.44	24.87	11.37	3.85	1.13	-21.57	8.38	-6.60
Total	3.58	8.54	5.14	4.62	12.96	25.74	11.40	-6.32	4.98	-0.67

Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

The structure of the manufacturing sector can also be analyzed by looking at the share of employment in each sub-sector. The share of employment in each sub-sector remained more or less stagnant over a long period. However, the food and beverage sub-sector lost significant employment while textile and wearing apparel made gain. The share of food and beverage employment in the total drastically decreased from 38.7 percent in 2010/11 to 27.6 percent in 2011/12, while the shares of textile and wearing apparel significantly increased from 7.8 percent and 3.4 percent in 2010/11 to 16.4 percent and 6.2 percent in 2011/12, respectively (see Annex 1).

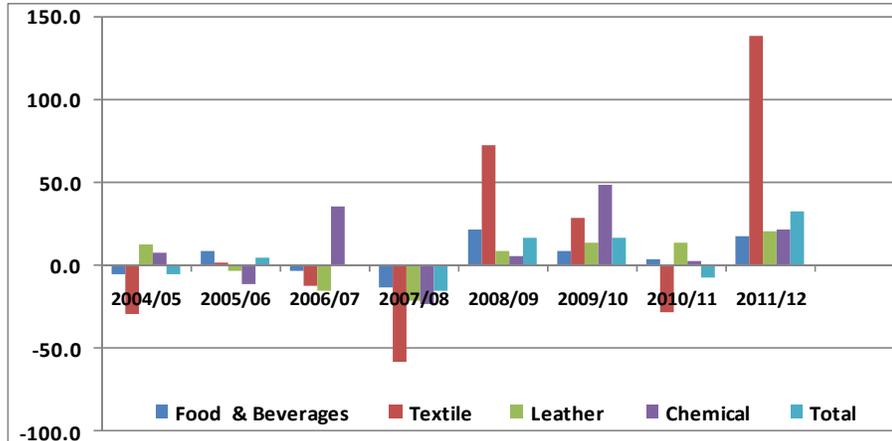
3.2.4.3 Wages and Salaries

Global investors relocate their enterprises to countries where labor is cheaper. This shows that the wage rate among the key FDI flow determinant variables. In a country where labor is abundant and high unemployment is high, the wage rate will be lower and hence FDI flows into it. After declining for the last few years, due to high inflation, the industrial average real wage started picking up during the second GTP implementation year. This could be due to a relatively higher increase in wage bill compared with the registered inflation during the same year. The rate varies from one sub-sector to another within the industry. The wage rate in the food and beverage, sub-sector for instance, leaped significantly in 2011/12 owing to reduced employment and increased wage so as to retain labor in the sector. Besides, increased wage was witnessed in the textile sub-sector during the same year, probably due to entry of export-oriented foreign investors such as AYKA (Figure 3.2).

The wage-price spiral concept elucidates how a change in one of these variables creates an uncontrollable spiral. An increase in wage leads to an increase in the demand for some goods and services thereby increasing the prices of goods and services. Higher prices increase the cost of living which, in turn, causes wages to

increase as laborers demand to be paid more. Higher wages, however, increase production cost for businesses thereby leading to another price rise and the spiral continues.

Figure 3.2: Trends in real Wage rate, growth in %



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

Having cheaper labor alone is not a sufficient condition for FDI to flow into a country; the key factor is its productivity. Generally speaking, as wage gets higher, labor intensive firms move to countries where labor is cheaper; indeed, if there are reliable suppliers of the key required services. Otherwise, firms resort to automation, by replacing some (but not all) workers with machines. This entails the need to provide the necessary critical supplies that investors require besides having cheaper labor.

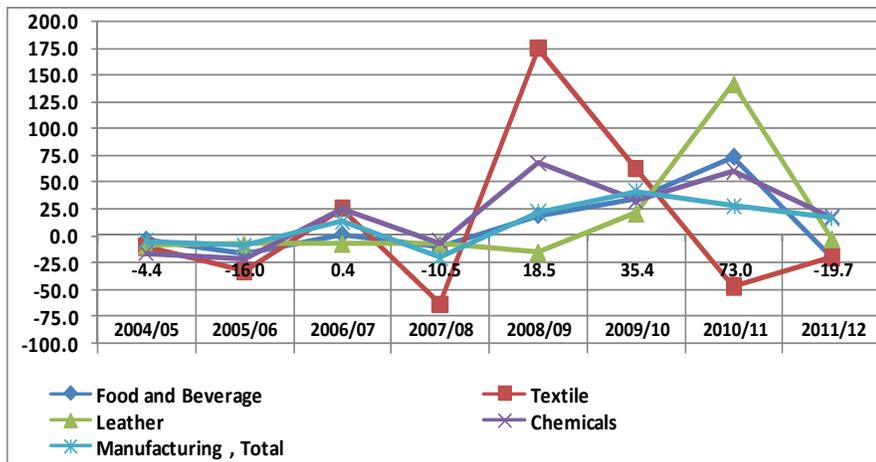
Retaining of experienced workers is critical to ensure efficiency since they have sharpened their skill through learning by doing. However, the sector has been facing the problem of retaining experienced factory workers mainly due to

departure of workers in search of better pay in other sectors. Thus, it is important to set wages that reflect the current living costs, inflation and wage rates in other sectors, the level of development and the supply and demand of labor.

3.2.4.4 Value Added

There have been fluctuations in real Value Added (VA) growth in the last few years. Huge fluctuations have been observed in the textile and leather sub-sectors. Manufacturing Value Added has been growing, on the average, by 9.1 percent over the last 8 years. Except the textile sub-sector, all the major sub-sectors have witnessed declining growth during the second GTP implementation year (Figure 3.3).

Figure 3.3: Trends in the Real Value Added, Growth in %



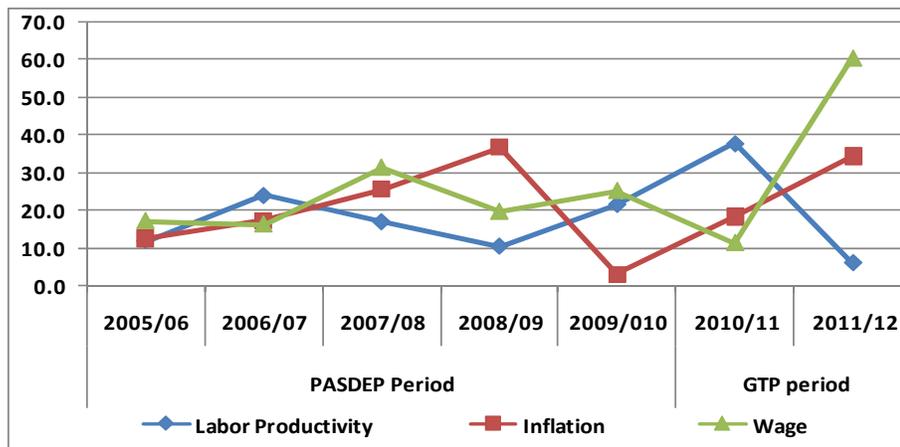
Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.4.5 Productivity and Efficiency

3.2.4.5.1 Labor Productivity

Labor productivity helps to determine the wage rate and develop the competitiveness of a firm. It is measured as Value Added per Persons engaged in the manufacturing sector. Productivity growth, on average, which has been about 18.3 percent, is less than the annual average inflation rate of 20.9 percent but higher than the average wage rate growth (17 percent), the increase in wage rate in the 2005/06-2011/12 period.

Figure 3.4: Labor Productivity and Inflation, Growth in %



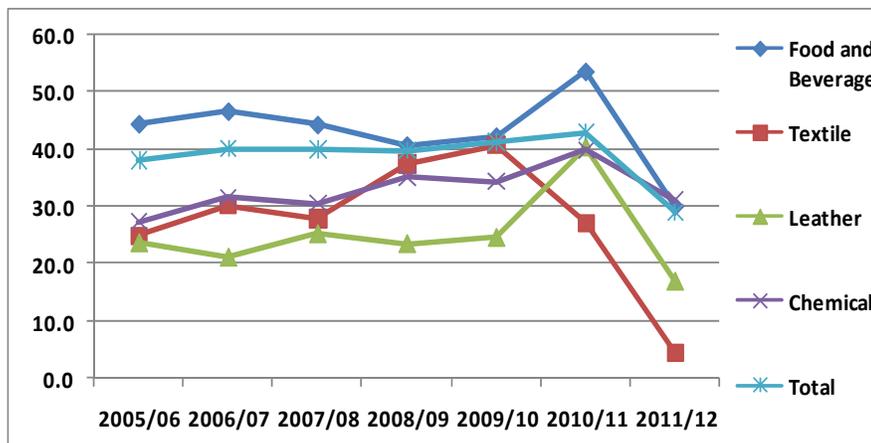
Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.4.5.2 Efficiency

Efficiency helps improve competitiveness since it helps produce greater output from a given input. Obviously, efficient firms are more competitive than less efficient one. Efficiency is measured as the ratio of Value Added (VA) to the

Gross Value of Production (GVP). The efficiency has started declining from the year 2010/11 onwards. The decline in the efficiency of the strategic sub-sectors, during the second GTP implementation year, is very significant. The strategic export-oriented sub-sectors happened to be the least efficient compared with the industry average. In order for the export-oriented sector to be competitive in the global market place, effort has to be made to reduce wastage and improve efficiency (Figure 3.5).

Figure 3.5: Trends in Efficiency (Value Added to GVP)



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

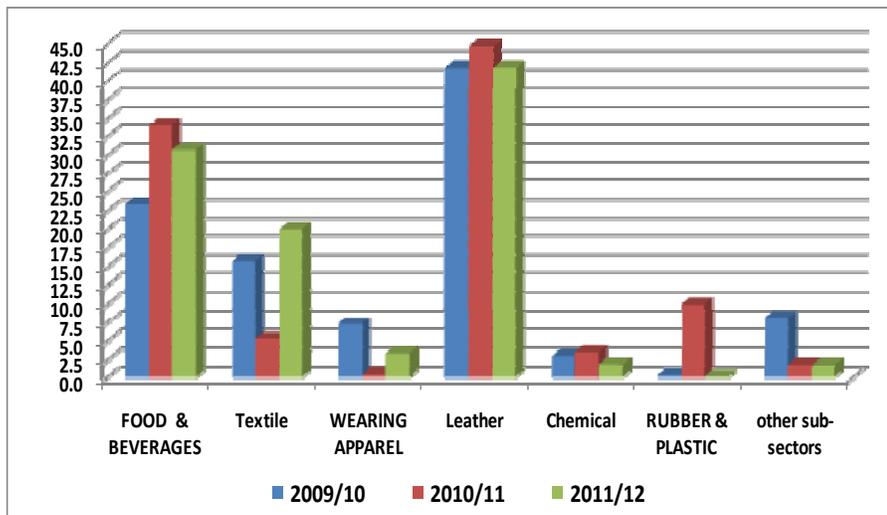
3.2.5. Manufactured Export

Manufactured export receipts increased from US 92 million Dollars in 2009/10 to US 386.3 million dollars in 2011/12 growing by more than three fold in three years. This, however, is less than the target set in GTP. Of the industry's sales, the share of export increased from 3 percent in 2009/10 to 6 percent in 2011/12 indicating increased export orientation of the sector.

The number of export items more or less remained stable for a long period despite a slight change for the textile sub-sector. Compared to the preceding years, the share of textile export receipts has increased while that of the other sub-sectors declined during the second GTP implementation year.

During the period (2009/10- 2011/12), some sub-sectors almost vanished from the export arena while others consolidated their position. Food and beverage, textile and leather are the three top exporting sub-sectors. Their combined share increased from 81.1 percent in 2009/10 to 92.6 percent 2011/12. This shows that instead of moving towards diversification there was concentration in a few commodities. This, in turn, may destabilize export earnings when external shocks occur. Thus, diversification measures should be put in place so as to cushion the effect of external shocks (Figure 3.6).

Figure 3.6: Manufactured Export Earnings, share of major sectors in %

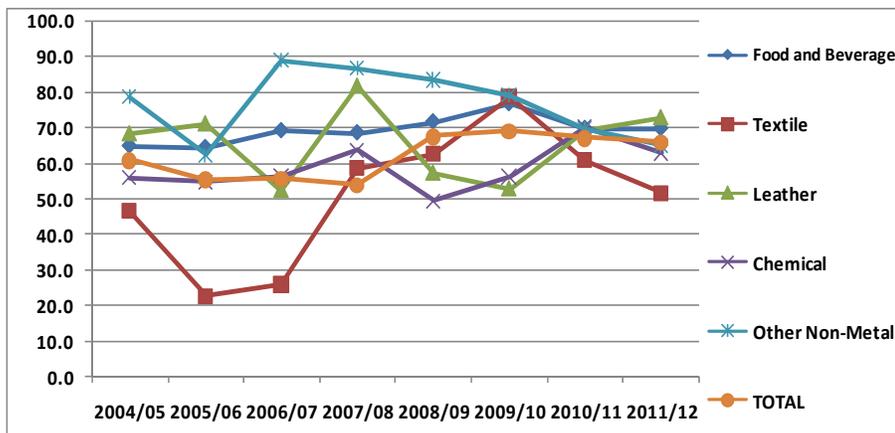


Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.6. Capacity Utilization

GTP planned to reduce idle capacity in the sector during the plan period. This, however, seems far from being achieved due to various reasons. During the first two GTP implementation years, the overall industry capacity utilization declined from 68.9 percent in 2009/10 to 65.9 percent in 2011/12. The capacity utilization of the majority of the sub-sectors declined during the first two GTP implementation years. The reduction in capacity utilization rate in the textile and wearing apparel sub-sectors are so significant during the same period. Although the leather sub-sector registered improved utilization rate during the first two years vis-à-vis the two preceding years, it remained lower than the 81.6 percent registered in 2007/08 (Figure 3.7).

Figure 3.7: Trends in Capacity Utilization, in %



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

Among the potential explanatory factors, shortages of raw materials, lack of market, increased entry and hence sharing of existing market, interruption of

power and water supply, are the major ones. Despite the problem of idle capacity, new firms joined the food and beverage, textile, chemical and other non-metals subsectors. This amounts to misallocation of scarce resources, which could have been used in other potential areas. Why do new investors join sectors which have been suffering from idle capacity? This could, among other things, be due to lack of full information by new entrants. Hence, in order to avoid misallocation of scarce resources, government has to provide the full information that an investor has to have before deciding to invest. Therefore, the relevant government agency has to play an investment coordination role by providing advice regarding better investment opportunities.

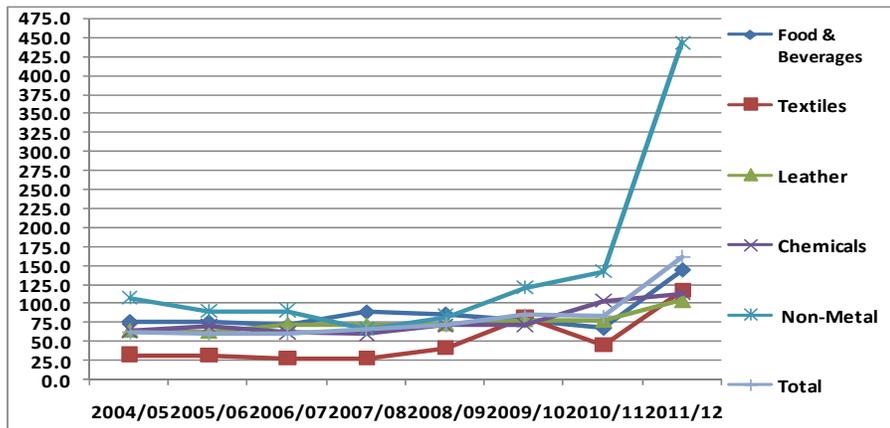
3.2.7. Capital Intensity

As technology advances, the systems of production become capital intensive and labor saving. Capital intensity is measured as the ratio of fixed asset to number of employees. Capital intensity dramatically increased during the first two GTP implementation years due to a variety of reasons. Among these, increased investment in machinery and equipment, entry of new enterprises with new labor saving technology but reduced number of employees are the major ones. In the food and beverage sub-sector, for instance, fixed asset increased from Birr 4.5 Billion in 2010/11 to Birr 7.2 Billion in 2011/12 while the number of employees declined from 67.1 thousand in 2010/11 to 50 thousand in 2011/12 (Figure 3.8).

In a labor abundant country, labor-intensive industrialization strategy is suggested. Given its endowment, Ethiopia pursues this strategy. The recent development, however, shows increased capital intensity of the manufacturing industry. The traditional labor-intensive sub-sectors like textile and leather have started moving towards capital-intensity, which entails lower employment opportunities for the growing population, university graduates and rural-urban migrants. The problem emanates from inappropriate technology choice. Since the country does not

produce capital goods, investors just pick available machinery without bothering its appropriateness to the endowment structure. The promotion of labor-intensive industrialization strategy, therefore, has to be supported by an incentive structure which discriminates between labor and capital-intensive systems of production.

Figure 3.8: Trends in the Capital Intensity, in 000 Birr



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

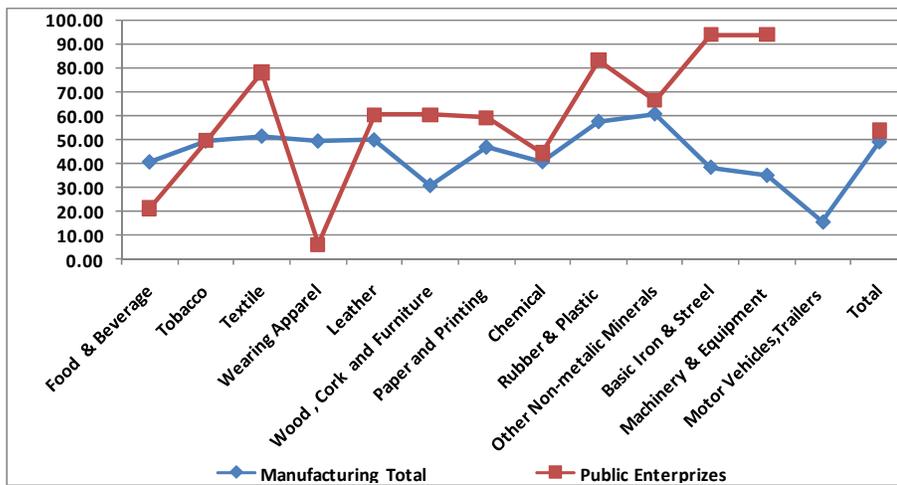
3.2.8. Fixed Asset

In the manufacturing industry, machinery and equipment has central role, especially in capital intensive manufacturing industries. Knowledge of the share of the various components in the total investment would help check whether each component takes the right share. Domestic investors have been witnessed spending significant sums of money on structures having low contributions to the production process, such as luxury offices and furniture.

The share of machinery and equipment in the total value of fixed asset varies from one sub-sector to the other. Contrary to the expectations, the share of machinery and equipment in the heavy industry such as basic iron and steel, machinery and equipment and motor vehicles and trailers on average (29.7 percent) is lower than the industry’s average (49 percent). This shows that a huge amount of money has been spent on other fixed assets having lower influence on direct production (Figure 3.9).

The share of machinery also varies by ownership structure. According to the data, machinery share in the total value of fixed assets for private sector is found to be less than the share in public enterprises indicating lower capital intensity in the private sector.

Figure 3.9: Machinery and Equipment/total Fixed Asset, share in % for 2011/12



Source: CSA, Report on Large and Medium Scale Manufacturing and Electricity Industries Survey, (various issues)

3.2.9. Import Intensity

The degree of intra-industry linkages can be judged by looking at the share of import in the total inputs of the sector. Import-intensity in the manufacturing industry declined continually from 0.583 in 2006/07 to 0.372 in 2011/12 indicating rising local sources for industrial raw materials.

Table 3.5: Trends in Import Intensity

Sub-sectors	SDPRP last year, 2004/05	PASDEP Period					GTP Period			
		2005/06	2006/07	2007/08	2008/09	2009/10	period average	2010/11	2011/12	First 2-year average
Food & Beverages	0.205	0.206	0.238	0.279	0.311	0.248	0.256	0.181	0.206	0.194
Tobacco	0.433	0.824	0.990	0.138	-	0.055	0.502	0.533	0.533	0.533
Textiles	0.396	0.409	0.415	0.296	0.467	0.370	0.391	0.388	0.244	0.316
Wearing Apparel	0.212	0.312	0.527	0.373	0.349	0.503	0.413	-	0.166	0.166
Leather	0.162	0.210	0.216	0.236	0.261	0.344	0.253	0.206	0.186	0.196
Wood	0.484	0.445	0.443	0.239	0.365	0.211	0.341	0.434	0.061	0.248
Paper & Printing	0.816	0.789	0.717	0.815	0.737	0.595	0.731	0.733	0.584	0.659
Chemicals	0.857	0.831	0.785	0.871	0.799	0.705	0.798	0.749	0.822	0.786
Rubber & Plastic	0.977	0.918	0.954	0.772	0.950	0.923	0.903	0.930	0.870	0.900
Non-Metalic Mineral	0.054	0.095	0.192	0.198	0.186	0.581	0.250	0.255	0.297	0.276
Basic Iron & Steel	0.608	0.672	0.989	0.998	0.804	0.791	0.851	0.786	0.778	0.782
Fabricated Metals, except Machinery & Equipment	0.812	0.926	0.875	0.802	0.866	0.846	0.863	0.524	0.571	0.548
Machinery & Equipment	0.961	0.98	0.939	0.964	0.94	0.851	0.935	0.870	0.109	0.490
Motor Vehicles	0.986	0.947	0.85	0.971	0.936	0.985	0.938	0.866	0.766	0.816
Furniture NEC	0.421	0.485	0.524	0.525	0.554	0.501	0.518	0.360	0.435	0.398
Total	0.460	0.495	0.583	0.536	0.527	0.510	0.530	0.441	0.372	0.407

Source: CSA, LMSMI report, various issues

The degree of import-intensity varies from one sub-sector to the other. The dependence on imports for raw materials declined in all the sub-sectors save the non-metallic minerals during the last few years. A significant decline was witnessed in the wearing apparel, leather, wood and machinery and equipment sub-sectors during the first two GTP implementation period compared with the PASDEP period average and the base-year (2009/10). Although improvements are expected, the freefall in import-intensity for the machinery and equipment sub-sector for the year 2011/12 is unlikely to be evidenced by marked deviation from the recent trend and given the existing low capacity for production of raw materials for heavy industries (Table 3.5.).

3.3. Transformation, Technological Progress, the S&T Policy and its Performances

3.3.1. Structural Transformation and Technological Progress

Structure refers to the relative importance of sectors in the economy in terms of production and factor use. Industrialization is then the central process of structural change. The interrelated processes of structural change that accompany economic development are jointly referred to as *structural transformation*.

The principal structural changes emphasized in the literature are increases in the rates of accumulation (Rostow, Lewis); shifts in the sectoral composition of economic activity (industrialization) focusing initially on the allocation of employment (Fisher, Clark) and later on production and factor use in general (Kuznets, Chenery); and changes in the location of economic activity (urbanization) and other concomitant aspects of industrialization (demographic transition, income distribution).

Technological change is a term used to describe incremental change in the quality and quantity of knowledge and ideas that are applied in the stream of activities to enhance the social and economic well-being of a society. Due to the positive nature of the implied change, it is also referred to as technological progress. Technological change occurs through the process of invention, innovation and diffusion that leads to the transformation of ideas and knowledge into tangible products that have high utility to human needs.

Technological change propels economic transformation; a change in the structure of an economy over time from a lower, rudimentary and subsistence level to a higher and more sophisticated level of economic activities. Thus, economic transformation is the attainment of significantly high level of economic growth above previous levels with capacity to sustain it through self-perpetuating economic activities that are associated with industrial and post-industrial production activities.

Economic transformation stems from high sustainable economic growth that feeds from, and into technological change. While the acquisition and application of technology are key factor in achieving economic transformation, economic activities are in turn, a veritable source of technological progress. Hence, economic growth, economic transformation and technological change are intervolving activities that reinforce each other (Kuznets, 1971).

Sources of technological change are innovation, direct acquisition from purchase, learning-by-doing, Research and Development (R&D) and transfer through interactions of economic activities between two countries (technology transfer). Experiences of countries indicate that, acquisition and application of technology depend largely on economic circumstances and natural endowments of countries. Nevertheless it is imperative for all economies to adapt to technological change

to inspire economic transformation that springs into high sustainable growth and prosperity.

Progressive increase in the outputs of major sectors of an economy that stems mainly from efficient utilization of economic resources and through the effective use of technology leads to high and sustainable economic growth, a sine qua non for economic transformation.

The basic ideas of modern growth theories are based on competitive behavior and equilibrium dynamics, diminishing returns and its relation to the accumulation of physical and human capital, the interplay between per capita income and the growth rate of population, the effects of technological progress as increased specialization of labor and discoveries of new goods and methods of production and the role of market structure (monopoly and/or competition) as an incentive to technological advancement.

Neoclassical growth theories underlined the effects of technological change on increased specialization of labor and discovery of new goods and methods of production in a self-perpetuating process of economic growth. At any given time, the economy has some amounts of capital, labor and knowledge that are combined to produce a given level of output, implying that changes in input over time leads to changes in output correspondingly. Regardless of the levels of any factor of production, technological change is the only factor that can change per capita long-run growth. Hence, the “effectiveness of labor” (knowledge or technology) is the fundamental determinant of high sustainable economic growth.

Technological change, according to endogenous growth theory, evolves from the interplay of economic forces in a two-way interaction between technology and economic life. Technology is a by-product of innovation, which is nurtured by rational economic behavior; but technology also transforms economic life in turn.

Ideas are the roots of technology, which can be obtained from the production process as factors of production, especially labor, tend to learn and know more through engagement in production activities and seek to improve over time.

Endogenous technological change emanates from three main sources; accumulation of physical and human capital, learning-by-doing and R&D. A firm that increases its physical capital learns simultaneously how to produce efficiently due to technical knowledge embodied in new capital goods. Each time a capital good is produced, the experience of producing it generates new insights to both the particular production sector and to the economy in general.

An increase in a firm's capital stock leads to a parallel increase in its stock of knowledge through learning by-doing. Each firm's knowledge is assumed to be a public good, so other firms can gain access to it at zero cost. This implies that knowledge spills over onto the entire economy so each firm's discovery of new knowledge (technological change) is a reflection of the level of technology of the overall economy and is therefore proportional to the change in the aggregate capital stock.

Technological change is further enhanced when firms, driven by profitability, invest their resources in R&D leading to either quality improvement or variety expansion. Technology is regarded as a private product, so investors enjoy some level of preservation either because of the possibility of secrecy or acquisition of patent rights. Innovation leads to new products either in quality or variety, so innovators exploit some form of monopoly power. It is assumed that there are no bounds to new ideas, so there is no diminishing return in the creation of technology.

As R&D success leads to a new "state-of-the art" version of the products through innovation, an existing product is replaced by an improved version of it

or completely different version rendering it obsolete. Since the newly invented product will be available in the market, other researchers can examine its characteristics and learn knowledge embodied in it and use it for further research that could lead to further innovation of an improved version of it. This is a case of knowledge spill over, which brings to the fore, the non-rivalry and non-excludability attribute of knowledge. This process is described as “Quality-Ladder” phenomenon or “Creative Destruction” (Schumpeter, 1975).

The analytical building blocks of the two main economic growth theories (neoclassical and endogenous) implies that, a baseline technology is a key input that provide an initial condition for appropriate mix of factors of production. This lends credence to the fact that, it is the value-adding capabilities of the factors of production as a result of their effective use in production process that generates economic growth. Even though they both underline the essence of technological change as the driving force of economic growth, they differ on the sources and mechanisms through which technological change occur to impact economic growth. The neoclassical theories subscribe to an exogenous (external) technological change effect while the endogenous proponents emphasize the emergence of technological change from active involvement in economic activities.

It is possible for technology transfer (exogenous technological change) to catapult economies with low level of technology to achieve high levels of sustainable growth (Bernard and Jones 1996; Dowrick and Rogers 2002). However, this requires adaptation of transferred technology into the stream of economic activities to provide a basis for “learning-by-doing” that diffuses into various sectors of the national economy to propel technological change.

Some other economies can grow through the transfer of existing ideas as well as positive externalities of production processes. This reflects the proper

application of ideas as a contingent part of the growth process, incorporated as a factor of production with a balanced need for using existing ideas and producing new ones. (Romer, 1992).

Although labor is significant input in the production function, mere size of population without developing and appropriately utilizing capabilities in the production process does not provide a significant advantage for technological change and economic transformation. This implies that, a foremost condition for optimal utilization of technological knowledge is development of robust human capital to be complemented by opportunities to unleash human capital in pushing the frontiers of technological change.

Thus, knowledge-in-use, not knowledge per se, is critical for engendering technological change and the nature and dimension of knowledge spillover effects determine the robustness of economic growth. Therefore, effective number of researchers, rather than the population, is the critical determinant of production of ideas. In essence, high sustainable economic growth, which is the fountain of economic transformation, hinges on significant increase in productivity, which, in turn, depends on technological change that emanates from new ideas (designs) through R&D that springs from the labor force, which is a function of human capital that is drawn from the population.

The productivity of competitive firms depends on its ability to innovate to adapt to technological change in order to gain from markets. Technological change depends on absorptive capacity (ability of capital investment or resource to yield appreciable level of return) of the overall economy. The absorptive capacity of the economy drives endogenous demand through the use of goods and services of a sector by other sectors of the economy.

The essential relationship between effectiveness of labor and technological change requires intensive and efficient utilization of outputs of different sectors

by other sectors of the economy. Thus, the intensity of sectoral interdependence generates a high level of learning by-doing and prompts the need for innovation that leads to R&D activities, which spring into technological change and economic transformation.

Other perspectives also converge on the critical relationship between technological change and economic transformation. The evolutionary growth theory, for instance, asserts that economic activities evolve and spring into economic transformation through natural interdependence between changes in aggregate demand and technological change (Foley and Michl, 2011). Moreover, the process of transformation growth hinges on structural changes of the evolution of an economy that is driven by growth in effective demand that, in turn, stimulates investments through adaptation to technological change to respond to market needs (Gualerzi, 2011). Inferences from Classical-Marxian evolutionary model points to the fact that technological change results from a random neutral innovation process that follows competitive market behaviors and motivation for profitability with labor productivity and wages evolving in concert (Levy and Dumeril, 2011).

Technological change occurs through a three chain relationships - **invention, innovation and diffusion**. Invention is the creation of an item based on original ideas and knowledge more often described as “breakthrough” technology. Innovation is additional creativity that improves the features and usefulness of invented products. Diffusion refers to the spread of technological knowledge into various streams of economic activities that expands the space for further creativity to amplify the chain mechanism of invention, innovation and diffusion.

Each aspect of this chain involves the appropriation of ideas through direct acquisition, “learning-by-doing” and R&D. Innovation is the pivot of this chain

relationship in that innovation inspires invention and motivates diffusion, implying that both invention and diffusion possess some attributes of innovation.

An economy without the requisite technological wherewithal needs to evolve a system of innovation to engender technological change, which is synonymous with knowledge. A system of innovation entails a network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies (Freeman, 1987). As the pivot of the chain relationship of technological change (invention- innovation-diffusion), innovation constitutes the bedrock of the system.

The essence of a system of innovation is that even though natural endowments confer strategic advantages for certain activities that relate to specific aspects of technological knowledge, it is possible to create the requisite conditions for activities to flourish and propel technological change. For instance, geographical agglomeration (concentration of people and activities) is essential for stimulating effective diffusion and accumulation among local firms through which the process of technological change can be skewed to reflect the functional performance of firms, sectors, countries and regions based on the efficiency of the institutions that embody the innovation system (Patrucco, 2005). This underlines the crucial role of institutions in achieving technological change in firms, sectors, countries and regions. A functional system of innovation amplifies technological change due to penetration of knowledge into various economic activities.

Innovation is therefore the most critical factor in transforming sectors into dynamic systems through adaptation and interaction of factors of production based on a coordinated national system of innovation. All agents within the innovation system are active partakers in the process of learning as economic activities continue over time. Learning takes place heuristically over a long period of time and possesses an incremental character.

It has been established that differences in developmental levels of countries are largely due to differences in the efficiency of production as measured by relative levels of TFP, which is a reflection of technology gap (Hulten and Isaksson, 2007).

Development experiences have shown that the most effective route to economic transformation is industrialization, the core of which is robust manufacturing activities. Historical evidence indicates that it is rare for any country to achieve high-sustained growth without industrializing as virtually all advanced economies experienced industrial revolution in their march towards development.

Manufacturing plays multiple roles in industrialization and economic transformation. It enhances productivity, increases absorptive capacity and provides the basis for “learning-by-doing”. Cross-country economic growth experience points to the fact that structural change, which leads to a shift in capital and labor from low productivity to high productivity sectors by propelling the TFP, is the driving force of economic transformation. Manufacturing had a crucial role in the stupendous economic transformation of emerging industrial economies and the East Asian industrial countries.

The process of structural transformation increases the relative contribution of manufacturing activities with strong interdependence among domestic sectors and regional economies. This provides the basis for expansionary effect of inter-industry linkages and creates opportunities that enhance prosperity and standard of living.

Effective utilisation of resources is fundamental for technological change and economic transformation. It requires strategies that create incentives for investments that use natural resources as intermediate goods and transform them into finished goods by a manufacturing production process that enhances the value-adding capabilities of factors of production. Institutional efficiency and

effective macroeconomic management are essential in creating solid infrastructure that forms the basis for fostering technological change and economic transformation.

Technology is related to the production of all aspects of goods and services and has four components. The first component is human capital involving the training of people to equip them with skills. The second is technical requiring the provision of necessary equipment and new materials. The third is institutional, which is about regulatory and policy framework and the tools of implementation. The fourth is the informational aspect, which is about accessing available developments and progress in global technological application. Each of these components is crucial for ensuring continuous improvement in the methods of production, discovery of new resources and thus creating the necessary conditions for efficient utilization of resources to foster technological change and economic transformation.

The role of the public sector is crucial in providing the requisite platform for generating ideas (knowledge or technology) through learning-by-doing and R&D activities, as well as coordinated linkages among sectors of the economy. This creates incentives for effective private sector investments that expand economic activities and opening-up opportunities for knowledge spillovers, learning-by-doing and R&D to engender technological change and economic transformation.

3.3.2. Science and Technology Policy⁹

The manufacturing industry of the country is consumer-goods oriented, has a loose linkage with other sectors; import dependent for inputs and its contribution in producing machinery necessary for various economic sectors including for it-self is

⁹ This section draws heavily on, the Ethiopian science and technology commission, national industrial science and technology policy

limited. The sector has encountered with major scientific and technological problems. Apart from importing technologies for production and troubleshooting technical activities, generation and utilization of suitable technologies as well as transfer and development of appropriate ones for reliable technological base leading to sustainable industrial development is not yet well established.

Cognizant of these problems, Ethiopia issued a Science and Technology (S & T) Policy which is aimed at building scientific and technological capability to generate, select, transfer, assimilate and link transferred technologies with the traditional ones. Capability building includes research and development, development of traditional technologies, transfer and development of technology, engineering and consultancy services, modification of technology, S&T manpower development, S & T information collection, processing, dissemination and S & T popularization based on the needs of the country.

3.3.2.1 S & T Policy Objective

The overall objective of the policy is to build and promote industrial science and technology capability for use to develop technological competence. The specific objectives include building capabilities that enable to:

- identify, promote, develop and utilize indigenous technologies which are widely used by the society and have proved to be useful;
- generate and apply of new technologies which have a significant social and economic contribution and facilitate conditions for their utilization;
- select, negotiate, transfer and develop appropriate technologies that are sustainable and environmentally sound, and
- promote effective and sustainable research and development activities which have linkages with the production process, product development and utilize its results.

3.3.2.2 S & T Implementation Strategies

Scientific and technological activities which mitigate the techno-economic bottlenecks and enhance the country's development should be undertaken. These activities are based on identifying and improving traditional technologies which are believed to be useful for selecting and transferring modern and appropriate technologies, building scientific and technological infrastructure, training manpower, utilizing R & D outputs and the like. To this effect, the major strategies should include:

- identifying those endogenous and modern technologies that contribute to development and support those programmes and projects that deserve priority,
- supporting scientific and technological activities that enable sustainable development and expand the utilization of those viable endogenous technologies,
- encouraging and supporting capability building to select, negotiate, transfer and develop appropriate technologies,
- supporting scientific and technological activities that would promote the linkage between endogenous and modern technologies,
- strengthening the linkage and interdependence between industry and other sectors so that the industrial sector can contribute to the development of the national economy,
- supporting research on product development, process improvement and local sourcing of imported raw materials,
- encouraging and supporting research and development activities that would enable local production of manufacturing machinery, spare parts & components, hand tools and means of transport required by the sector and others as well,
- encouraging and supporting the promotion of institutions undertaking effective and sustainable R & D activities and establish new ones as required,

- assisting training activities to meet the manpower requirement and support the strengthening and establishment of training institute,
- encouraging and supporting the establishment of support institutions assisting scientific and technological activities,
- encouraging repair and maintenance, modification and innovative activities;
- encouraging efforts to increase productivity, improve product quality, and quality control activities,
- supporting scientific and technological activities that would improve the quality, and competitiveness of export products,
- facilitating conditions to provide the necessary support for the creation of linkages and interdependence among existing and forthcoming R&D institutions, higher learning institutions and the industrial sector so as to undertake R & D activities and utilize its outputs as per the needs of the sector; and
- Preparing and implementing industrial S&T plans, programmes and projects.

3.3.2.3 Priority Manufacturing Sectors

Since there are many constraints to promote technological change in all sectors, it is necessary to be selective and identify areas in which the country has comparative advantages. In this respect, the S& T policy has identified five manufacturing sub-sector as its priority areas. These include:-

3.3.2.3.1 Basic Metals and Engineering

The objectives are to create and promote the capacity to design and manufacture agricultural tools and machinery, build the capacity to design and manufacture machinery, spare parts, components, hand tools and equipment for the industrial sector, undertake activities to develop materials and equipment to assist health, education, and R&D activities, promote capability to design and manufacture

electronics and electrical products including their manufacturing machinery domestically, undertake scientific and technological activities that would enable to modify, adapt and assimilate transferred technologies, and undertake activities that strengthen foundry, heat treatment, and machining which have special and all round services.

3.3.2.3.2 Food and Beverage

Here objectives are to improve and promote the production and preservation techniques of traditional foods and beverages, undertake research on traditional foods for better & nutritionally balanced content, undertake research that enables the preparation of nutritive and preferable food for babies and lactating mothers, generate, improve & promote the technology of handling, preparing and packaging of cereals, coffee and easily perishable food items like fruits and vegetables, fish, meat, milk and its products, and undertake research on by - products of the food industry to suit them for better use.

3.3.2.3.3 Chemical

In this sub-sector, the tasks are to create capability to produce chemicals and chemical products used as inputs for the agricultural and other sectors both in quantity and quality, undertake research on inputs such as mineral fillers, additives and chemicals from locally available natural products, undertake research on local sourcing of imported inputs for food, beverage, leather, textile, pharmaceuticals, plastic, paper and pulp production, and undertake research on techniques that could eliminate or reduce pollution of industrial dust, liquid waste and residues.

3.3.2.3.4 Textile

The objectives are is to strengthen efforts that would improve traditional cloth making technology, promote competence to improve production process, product diversification, product quality, pattern development, design and dyeing techniques, and undertake research and development on textile technology.

3.3.2.3.5 Leather

The planned activities include undertaking research on the improvement of traditional handling and tanning techniques and production of chemical inputs from locally available natural products, improving and promoting technical competence of handling, preparing and use of skins and hides, and undertake research to improve the production process and the development of new products of hides, and skins, and promoting the recycling methods of by-products and refuses.

3.3.3. S & T Policy Implementation

In an attempt to implement the Science and Technology policy, a number of measures have been undertaken. These include:-

- gearing the education policy towards producing trained manpower that industries require. Consequently universities have given greater weight to science and engineering fields,
- establishing a:
 - ✓ metal and engineering institute,
 - ✓ leather institute,
 - ✓ textile institute, and
 - ✓ food institute.

Chapter IV

Trends and Patterns of Gender Gaps in Urban Employment in Ethiopia

4.1. Introduction

Sustainable development demands, among other things, that employment opportunities are accessible to individuals who are actively seeking jobs. However, many people do not find jobs even when they are in the labor market and actively seek jobs. In fact, when jobs are created it is important that they are accessible to all individuals who seek them without any discrimination based on such factors as gender, religion or other identities.

The global community has made concerted efforts to achieve equality of women and men in the world of work since the Fourth World Congress in Beijing in 1995. Assessment of progress on this front has come with mixed results (World Bank, 2012). On the one hand, with enhanced women's access to education, health care, family planning services together with expansion in infrastructure such as roads and rural electrification, women's labor market participation has improved. Nevertheless, gender discrimination in employment which puts women at a disadvantage in the labor market remains a critical development challenge to policy makers (World Bank, 2012). When a gender gap in employment exists, the link between economic growth and poverty cannot function to benefit both males and females equally. In fact, economic growth itself cannot be sustained if women are unable to participate in and find productive employment opportunities in the labor market.

Cognizant of its different benefits, the Government of Ethiopia (GOE) has made employment generation one of the top priorities. To this end, the GoE has adopted national employment policy and has designed and implemented different labor-market related strategies and programs to translate the policy into action. Using secondary data from published sources and other relevant literature, this Chapter attempts to shed light on gender differences in urban labor market participation and employment in Ethiopia.

4.2. Ethiopia's Employment Policy and Strategies

The Ethiopian economy has registered rapid economic growth over the past decade or so. The Government of Ethiopia recognizes that employment of the national labor force in productive work is an essential link between economic growth and poverty reduction. To this end, the GoE formulated and has implemented a national employment policy and strategy since 2009. Ethiopia's employment policy is governed by the Labor Law and by different international conventions ratified by the country (Anonymous, 2009). By creating for consolidated framework for labor demand, labor supply and labor institutions, the employment policy strives to enhance social welfare, accelerate economic growth and create political stability in the country (*ibid.*).

To this end, creating jobs for men and women in the country has been one of the focal points of the country's successive development programs including the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) and the Growth and Transformation Plan (GTP). To achieve the employment policy objectives, the GoE has implemented various policy measures to create and expand opportunities for employment of the economically active labor force in the country. It has, for instance, formulated and implemented several development programs and strategies to promote urban employment opportunities and improve the welfare of urban dwellers. Two examples of such

initiatives include (1) Micro- and Small Enterprises (SMEs) development strategy, and (2) Integrated Housing Development Program (IHDP). The IHDP states that “the intention of the integrated housing and development program is alleviating problems of housing and unemployment prevalent in cities and towns of the country, realizing housing ownership of urban dwellers through promotion of saving culture, strengthening the construction industry and urban upgrading and renewal.” Likewise, the SMEs are entrusted, among others, with contributing to economic development by providing employment through job opportunities to new graduates from universities, colleges and technical and vocational training centers (FDRE, 2011).

The Growth and Transformation Plan (GTP) also puts quantified employment targets which the IHDP and SMEs are expected to generate in Ethiopia. According to the GTP, jobs created through IHDP to reduce urban unemployment will grow from 176 thousand in 2009/10 to 182 thousand in 2014/15 (MoFED, 2010). Similarly, the GTP stipulates that SMEs will create three million jobs by the end of the plan period (MoFED, 2010).

4.3. The Urban Population and Labor Market in Ethiopia

According to the 2007 Population and Housing Census, Ethiopia’s population was projected to be 84.3 million people in 2012 (CSA, 2013), of which only 17.2% are estimated to be living in urban areas. However, the absolute number of the country’s population living in urban areas has increased by around 29.5% between 2004 and 2012. Compared to the rural population, Ethiopia’s urban population has a larger proportion of the youth (persons aged 15-29 years). For instance, in 2004, the youth population living in urban and rural areas were estimated to be around, 33.3% and 27.4%, respectively.

4.3.1. Urban Labor Force Participation

Participation in the labor market is an important decision to experience different labor market outcomes including employment and unemployment. Labor market participation is influenced by a host of factors including demand and supply side characteristics of the labor market. In fact, a recent World Bank report indicates that a person's decision to participate in the labor market "... involves reallocating time across a variety of activities, a process that can be difficult and costly, particularly for women." This is of relevance to the situation of women in Ethiopia where they take much more responsibilities in undertaking non-market activities in their households.

In the rest of this section the trends of males and females in labor market across different regions in Ethiopia are investigated. The main sources of data for this analysis are the several rounds of Urban Employment Unemployment Surveys (UEUS) of the Central Statistical Agency. Table 4.1 below provides labor force participation rates of males and females between 2003 and 2012. As indicated in the table, labor force participation rate increased for both males and females at the national level. However, the labor force participation rate of males exceeded females by more than or equal to 10 percentage points during the same period.

The data also indicates that there is high a regional variation in the urban labor force participation rates and participation rates did not converge over time. Whereas some regions registered rapid increment of labor force participation rate (e.g. Tigray and Amhara), others recorded a decline (e.g. Gambella and Addis Ababa) or only slowly increasing participation rate (e.g. Dire Dawa).

Table 4.1: Trends of urban labor force participation by region and sex

Regions	2003		2006		2010		2012	
	Male	Female	Male	Female	Male	Female	Male	Female
Tigray	51.0	47.1	58.1	45.9	62.7	51.5	67.0	56.9
Afar	69.8	60.8	65.0	47.9	62.4	42.7	75.4	61.3
Amhara	57.4	52.6	64.7	52.1	64.4	52.5	70.9	59.2
Oromia	60.1	51.8	66.1	52.0	65.2	53.2	70.9	55.6
Somali	62.3	51.2	54.7	44.3	53.3	36.5	57.7	51.6
Benishangul-Gumuz	59.3	45.4	71.9	54.2	68.8	54.5	75.8	64.0
S.N.N.P.R.	63.4	55.7	65.9	51.5	66.3	53.1	68.2	57.1
Gambella	63.5	55.9	66.4	48.4	58.9	50.2	56.1	47.5
Harari	66.7	57.3	65.3	57	67.5	57.1	70.5	60.0
Addis Ababa	71.4	56.0	71.2	55.7	70.4	59.4	71.0	54.1
Dire Dawa	64.7	61.4	64.1	55.8	63.2	53.7	67.4	61.2
Total	62.9	53.6	66.1	52.2	65.7	53.7	69.7	56.2
CV	9.17	9.39	7.62	8.26	7.48	12.59	9.22	8.37

Source: CSA's UEUS data from various years, and own computation.

Table 4.2 illustrates trends of gender gap in urban labor force participation rates at national and regional levels. Compared to 2003, the gender gap in 2012 was increased by nearly five percentage points at the national level. In most regions, gender gaps in urban labor force participation also remained on the rise. However, the gender gap registered in 2012 is considered as a reversal when compared to the gender gaps recorded in 2006 and 2010.

Table 4.2: Trends of gender gap in urban labor force participation rates

	2003	2006	2010	2012
Tigray	3.9	12.2	11.2	10.1
Afar	9	17.1	19.7	14.1
Amhara	4.8	12.6	11.9	11.7
Oromia	8.3	14.1	12	15.3
Somali	11.1	10.4	16.8	6.1
Benishangul-Gumuz	13.9	17.7	14.3	11.8
S.N.N.P.R.	7.7	14.4	13.2	11.1
Gambella	7.6	18	8.7	8.6
Harari	9.4	8.3	10.4	10.5
Addis Ababa	15.4	15.5	11	16.9
Dire Dawa	3.3	8.3	9.5	6.2
Total	9.3	13.9	12	13.5
CV	44.81	25.89	25.86	30.84

Note: CV stands for coefficient of variation and is computed as standard deviation as a percentage of the mean.

Source: CSA's UEUS data from various years, and own computation.

Table 4.3 presents trends of urban labor force participation rates by gender and age. Labor force participation has increased for both males and females during the 2003-2012 period. However, the increase in the participation rate is higher for males (seven percentage points) than for females (two percentage points). Moreover, changes in labor force participation have been different for different age groups. As might be expected labor force participation rate has an inverted U-shaped relationship with age. More specifically, labor force participation rates are lower for individuals in the younger and older-age cohorts and greater for persons with the middle. For persons with age 65 years and above, not only is the participation rate but also declining over the 2003-2012 period. In contrast, labor force participation rates of persons in 10-14 and 15-19 age groups have shown a steady rise over the same period. In other words, whereas the labor force participation rate has generally declined between 2003 and 2012 for

persons aged 65 years and above, the reverse trend is observed for persons in the age groups of 10-14 and 15-19 years.

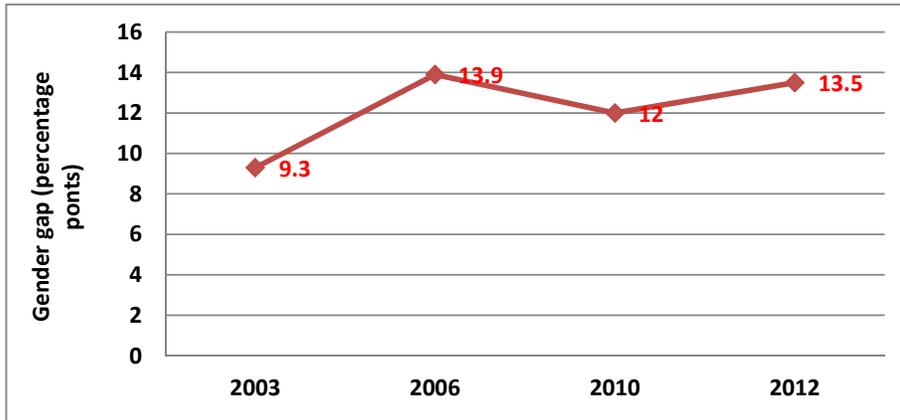
Table 4.3: Trends of urban labor force participation rate by age and sex

Age	2003		2006		2010		2012	
	Male	Female	Male	Female	Male	Female	Male	Female
10-14	10.2	10.2	15.4	11.1	10.1	9.7	14.0	13.6
15-19	33.0	38.8	36.0	38.7	29.3	34.2	34.0	37.2
20-24	71.1	71.0	75.5	67.6	73.9	68.5	78.7	70.5
25-29	91.4	79.5	91.5	74.8	92.8	79.5	94.4	79.2
30-34	96.2	81.3	97.2	77.9	95.0	81.6	96.1	81.7
35-39	97.5	79.6	96.8	78.5	97.3	81.4	96.7	81.3
40-44	95.8	78.4	95.5	73.0	97.4	74.3	97.0	79.2
45-49	96.4	63.8	96.6	70.5	97.3	73.0	96.2	73.8
50-54	92.9	58.2	95.8	57.5	93.0	56.9	94.4	66.3
55-59	83.6	50.8	88.1	50.7	85.5	47.6	89.7	46.8
60-64	74.2	32.9	77.0	41.5	76.0	33.4	80.2	36.1
65+	48.5	20.3	50.8	20.0	43.3	17.2	48.7	18.6
Total	62.9	53.6	66.1	52.2	65.7	53.7	69.7	56.2

Source: CSA's UEUS data from various years, and own computation.

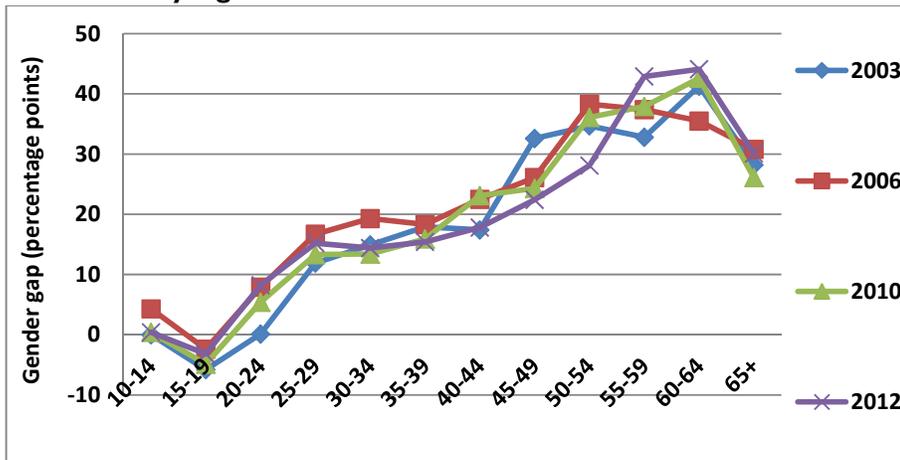
Figure 4.1 depicts trends of gender gap in labor force participation rates. From the graph one can observe that the gap has increased from 9.3 percentage points in 2003 to 13.5 percentage points in 2012. The reason for this rising trend in gender gap in labor force participation is not clear and deserves further research to investigate the demand and supply side determinants of urban labor force participation in Ethiopia. Gender gap in labor force participation rates has not been age-neutral. In fact, it is lower for the youth population and appears to rise with age (see Figure 4.2). Among other things, the declining gender gap in labor force participation rates among the youth might be associated with declining gender gap in education and training.

Figure 4.1: Trends of Gender Gap in Urban Labor Force Participation Rates



Source: CSA's UEUS data from various years, and own computation.

Figure 4.2: Trends of Gender Gaps in Urban Labor Force Participation by Age



Source: CSA's UEUS data from various years, and own computation.

Table 4.4 provides the main reasons given by persons aged 10 years and above for not taking part in the labor force. As can be observed in the table the dominant reason for non-participation tends to be related to school attendance or being a student in the reference period. Apart from this, domestic work, and 'pregnancy and child care' remain important reasons for non-participation of females. However, it is important to note that the percentage of females who do not participate in the labor force due to domestic responsibilities has shown a sharp drop between 2003 (28%) and 2012 (15.8%). The percentage of individuals who are not in the labor force because they are pensioned and/or because they are too old to work has increased for both males and females. In contrast, the percentage of persons who did not participate in the labor force because of illness, and injury/disability remain virtually the same during the period under review. This is an unexpected result given Ethiopia's improved health service coverage which has been registered in recent years.

Table 4.4: Major Reasons for not being in the Labor Force

Reasons	2003		2006		2010		2012	
	Male	Female	Male	Female	Male	Female	Male	Female
Home making	2.1	28	0.5	21.0	0.6	14.8	0.8	15.8
Pregnancy and child care	---	na	---	3.3	---	4.4	---	5.2
Student	79.5	50.7	81.5	53.1	82.2	58.7	82.4	56.8
Injury/disability	1	0.5	0.7	0.5	0.7	0.5	1.1	0.5
Illness	5.6	6.9	5.8	7.8	4.8	6.3	4.9	6.2
Too young	2.8	2.3	2.7	2.2	2.1	1.6	1.3	0.9
Remittance	na	na	0.7	1.9	1	2.4	0.9	1.7
Old age/Pensioned	5.3	6.8	6.1	7.6	7.7	9.5	7.4	11
Other	3.3	4.5	2.1	2.6	0.8	1.8	1.3	1.9

Note: 'na' denotes data on these variable were not available for the corresponding year.

Source: CSA's UEUS data from various years, and own computation.

4.4. Trends of Urban Employment and Unemployment Rates

4.4.1. Composition of Sectoral Urban Employment Shares

Table 4.5 presents sectoral composition of employed labor force in urban areas of Ethiopia. As indicated in the table, the service sector had been the largest contributor to urban employment in the country followed by industry and agriculture, in that order. However, the proportion of workers employed across these sectors largely remained unchanged during the 2003-2012 period and no sector had become relatively more or less important over time. Perhaps these trends might suggest that mobility of workers from low productivity to higher productivity manufacturing sectors had been either very slow or not happened yet. Experience from other countries indicate that as countries grow economically the share of labor force employed in agricultural activities declines and the share of workers engaged in non-agricultural activities including manufacturing and service sectors grow very rapidly (ILO, 2014). In fact, a recent report by to ILO (2010, p. 37) states that “the relationship between sectoral employment and economic development (measured using gross domestic product) generally indicates a shift from agriculture to industry to services, although some countries have moved directly from dominant shares in agricultural employment to services and have not undergone the intermediate shift to industry.”

Table 4.5: Trends of Sectoral Urban Employment Shares

	2003	2006	2010	2012
Agriculture, hunting, fishing and forestry	8.9	8.6	11.1	8.2
Manufacturing, mining, quarrying and construction	21.5	21.0	20.6	20.5
Services	69.6	70.4	68.4	71.3

Source: CSA's UEUS data from various years, and own computation.

4.4.2. Regional Variation in Urban Employment Rate

Tables 4.6 and 4.7, respectively, present trends of employment rate by region and sex, and trends in regional variation in gender gaps. Employment rates have generally increased between 2003 and 2012. However, employment differentials exist between males and females and across the different regions. It is also essential to note that females' employment rates are consistently lower than employment rates of males. At the beginning of the period under review, the lowest urban employment rate for females was found in Tigray (30%) followed by Addis Ababa (31%). In the same period, the highest employment rate was observed in Gambella followed by S.N.N.P.R. For males, the lowest and the highest urban employment rates in 2003 were recorded in Tigray and Gambella, respectively. In 2012, the lowest urban employment rate was in Addis Ababa (for females) and Somali (for males). In contrast, the highest urban employment rate was found in Benishangul-Gumuz for both males and females.

Table 4.6: Trends of Urban Employment Rate by Region and Sex

Regions	2003		2006		2010		2012	
	Male	Female	Male	Female	Male	Female	Male	Female
Tigray	40.4	30	52.7	37.6	56	38.3	59.4	41.6
Afar	58.8	35.7	60.9	33.5	59	32.5	71.4	50.2
Amhara	48.3	38.6	59.8	45.4	58.6	40.5	63.2	46.1
Oromia	50.3	34.5	61	41.9	59.6	40.2	63.3	42.2
Somali	54.9	38.3	43.5	31.6	49.5	28.1	52	41.4
Benishangul-Gumuz	55.3	33.6	68.6	47.8	66.7	44.3	72.3	57.6
S.N.N.P.R	56.1	40.2	61.3	42.6	61.8	41	62.7	47.1
Gambella	61.1	46.4	63.4	38.8	54.1	41.6	54.7	41.3
Harari	54.4	36.6	57.2	46.8	62.7	43.7	65.5	49.5
Addis Ababa	56.3	31.5	56	35.6	57.9	38	59.9	37.3
Dire Dawa	47	32.2	52.8	40.6	49.6	32.5	56.7	43
Total	51.8	34.8	58.5	40.7	58.5	39	61.7	42.6

Source: CSA's UEUS data from various years, and own computation.

However, gender gap remains high and rising. Between 2003 and 2012, gender gap in urban employment has increased from 17 to 19.1 percentage points (see Table 4.7).

In fact, a look at the available data indicates that there is a considerable amount of regional variation in the reduction of gender gaps in urban employment rates. Whereas there has been an encouraging progress in gender gap reduction in most regions, gender gaps have risen in three regions, namely, Amhara, Oromia and Tigray. In 2003, the largest gender gap was found in Addis Ababa (24.8 percentage points) followed by Afar (23.1 percentage points). In contrast, in the same period the lowest gender gap was observed in Amhara (9.7 percentage points) followed by Tigray (10.4 percentage points). However, it seems that these regions have not been able to further reduce gender gaps in urban employment in their urban areas. In fact, gender gaps in both regions significantly increased in 2012.

Table 4.7: Trends of Gender Gaps in Urban Employment Rate by Region

Regions	2003	2006	2010	2012
Tigray	10.4	15.1	17.7	17.8
Afar	23.1	27.4	26.5	21.2
Amhara	9.7	14.4	18.1	17.1
Oromia	15.8	19.1	19.4	21.1
Somali	16.6	11.9	21.4	10.6
Benishangul-Gumuz	21.7	20.8	22.4	14.7
S.N.N.P.R.	15.9	18.7	20.8	15.6
Gambella	14.7	24.6	12.5	13.4
Harari	17.8	10.4	19	16
Addis Ababa	24.8	20.4	19.9	22.6
Dire Dawa	14.8	12.2	17.1	13.7
Total	17	17.8	19.5	19.1
CV	28.48	30.71	17.97	22.28

Note: CV stands for coefficient of variation and is computed as standard deviation as a percentage of the mean.

Source: CSA's UEUS data from various years, and own computation.

4.4.3. Urban Unemployment Rate

In this section we present and describe the trends of urban unemployment rates and gender gaps in urban unemployment across different parts of Ethiopia and among different age-groups. Unemployment is a negative labor market outcome, which is measured by the number of individuals unemployed as a percentage of the total labor force. Therefore, we measure gender gaps in urban unemployment rate by subtracting females' unemployment rates from males' unemployment rates.

4.4.3.1 Regional Variation in Urban Unemployment Rate

Table 4.8 presents regional variation in urban unemployment rates in Ethiopia. As is observed in the table females had consistently higher unemployment rates than males. In fact, during the period under review the likelihood of unemployment for females had been twice of males' unemployment rate. It is interesting to note, however, that the unemployment rate for both males and females had indicated a strong reduction between 2003 and 2012, but with considerable differences across regions. Between 2003 and 2012, reduction in unemployment rate is greater for females (11 percentage points) than for males (6.2 percentage points) at the national level. In 2003, the highest and lowest female unemployment rates were observed in Dire Dawa and Gambella, respectively. While unemployment rate declined across all regions and for females and males, Dire Dawa had the highest unemployment rate in 2012.

Table 4.8: Trend in Urban Unemployment Rate by Region and Sex.

Regions	Unemployment rate (%)							
	2003		2006		2010		2012	
	Male	Female	Male	Female	Male	Female	Male	Female
Tigray	20.6	36.2	9.4	18.1	10.6	25.7	11.2	26.8
Afar	15.7	41.2	6.3	30.1	5.5	23.8	5.3	18.3
Amhara	16	26.6	7.7	12.8	8.9	22.8	10.8	22
Oromia	16.3	33.3	7.8	19.3	8.5	24.4	10.7	23.9
Somali	11.8	25.1	20.5	28.7	7.1	22.9	9.8	19.7
Benishangul-Gumuz	6.6	26	4.6	11.8	3	18.7	4.5	9.9
S.N.N.P. R	11.6	27.7	7	17.2	6.8	22.8	8	17.5
Gambella	3.9	17	4.6	19.8	8.1	17.1	2.5	13
Harari	18.4	36.1	12.4	17.9	7.2	23.6	7.2	17.5
Addis Ababa	21.2	43.7	21.4	36.1	17.9	36.1	15.6	31.1
Dire Dawa	27.4	47.6	17.6	27.2	21.5	39.6	15.8	29.5
Total	17.6	35.2	11.5	22.1	11	27.4	11.4	24.2

Source: CSA's UEUS data from various years, and own computation.

Table 4.9 illustrates trends of gender gaps by region. Interestingly, gender gaps narrowed from 17.6 percentage points in 2003 to 12.8 percentage points in 2012. However, labor market performance in closing the gender gap remains heterogeneous across the different regions in Ethiopia. In Tigray, the gender gap remained almost unchanged between 2003 and 2012 while the gender gap had slightly increased in Amhara during the same period. In 2003, the Amhara region had the lowest unemployment rate differential between females and males. Since then the gender gap in unemployment rate had increased. It is not clear what factors created this trend. The fastest decline in the gender gap occurred in Benishangul-Gumuz followed by Afar.

Table 4.9: Trends of Gender Gaps in Urban Unemployment Rate by Region

	2003	2006	2010	2012
Tigray	15.6	23.8	15.1	15.6
Afar	25.5	5.1	18.3	13
Amhara	10.6	11.5	13.9	11.2
Oromia	17	8.2	15.9	13.2
Somali	13.3	7.2	15.8	9.9
Benishangul-Gumuz	19.4	10.2	15.7	5.4
S.N.N.P. R	16.1	15.2	16	9.5
Gambella	13.1	5.5	9	10.5
Harari	17.7	14.7	16.4	10.3
Addis Ababa	22.5	9.6	18.2	15.5
Dire Dawa	20.2	0	18.1	13.7
Total	17.6	10.6	16.4	12.8
CV	26.79	64.48	17.87	27.36

Note: CV stands for coefficient of variation and is computed as standard deviation as a percentage of the mean.

Source: CSA's UEUS data from various years, and own computation.

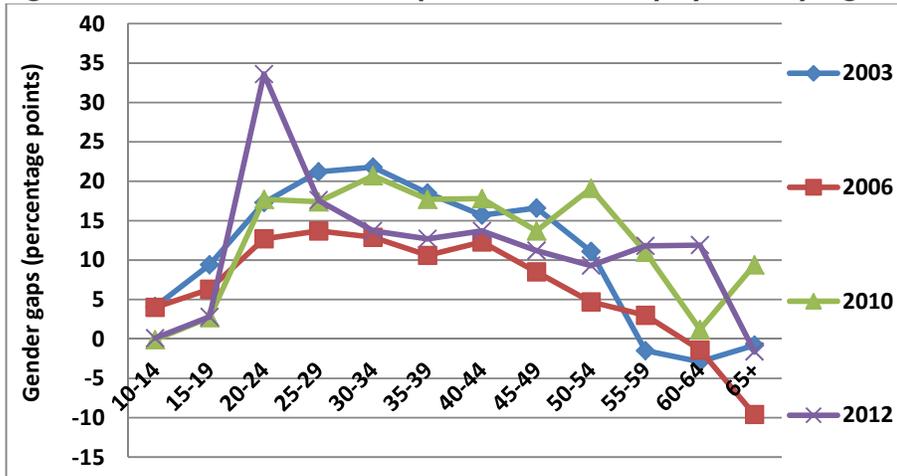
4.4.3.2 Variation of Urban Unemployment among Different Age Groups

The age of an individual matters for various demographic and socioeconomic outcomes including employment. An individual's job preferences and expectations as well as his/her responsibilities vary with age. The effect age has for labor market outcomes also tends to differ between females and males. Likewise, supply side characteristics of a given labor market also matter for employment or unemployment outcomes. Often times labor markets in developed and developing countries alike do not treat males and females in the

same way. As such, females and males face different labor market outcomes. In this section we examine to what extent urban unemployment rates vary between females and males in Ethiopia.

Figure 4.3 depicts gender gaps in unemployment across different age groups. As can be seen in the figure, the unemployment gender gap had been very high with unemployment rate of females being 5-20 percentage points larger than that of males in most age-groups for most of the years reviewed. It is also noticeable that gender differential in unemployment rate between females and males appeared to be greatest among the young in 2012. The gender gap in unemployment was lower in 2006 compared to 2003, but then the trend was reversed in 2010 and declined in 2012. This implies that progress in narrowing the gender gap remains sporadic and needs the taking of additional policy measures to decrease gender differentials in unemployment between females and males.

Figure 4.3: Trends of Gender Gaps in Urban Unemployment by Age



Source: CSA's data from various years, and own computation.

4.5. Conclusions

As in other socioeconomic spheres, gender equality in labor market participation and employment remains an important goal of government policies around the world. Yet differentials in labor market participation, employment and unemployment between males and females remain high. Using secondary data for urban labor market in Ethiopia, this Chapter has described gender gaps in terms of labor force participation, employment rate, and unemployment rates at the national level and also across regions in the country. According to our descriptive analysis the following initial conclusions can be made:

First, urban labor market participation of both males and females increased between 2003 and 2012 but males' participation rate remained larger than females' by nearly 10 percentage points or higher. The gender gap in urban labor force participation increased from 9.3 to 13.5 percentage points between 2003 and 2012, but gender gaps across regions converged during the same period. Second, between 2003 and 2012, urban employment rate at national level increased by nearly 10 and 8 percentage points for males and females, respectively. However, during the same period gender differentials in employment rate between males and females increased from 17 to 19.1 percentage points. Regional variation in employment gender gaps decreased significantly during the same period. Third, between 2003 and 2012, national level urban unemployment rate decreased from 17.6 to 11.4 percent for males and from 35.2 to 24.2 for females. Interestingly, differences in unemployment rates between females and males declined from 17.6 to 12.8 percentage points but variation in unemployment gender gap widened across regions during the same period.

Part II

**Small and Micro Enterprises (SMEs)
Development in Ethiopia: Policies,
Performance, Constraints and
Prospects**

Introduction to Part II

Background

The Small and Micro Enterprise (SMEs) is described as the natural home of entrepreneurship. It has the potential to provide the ideal environment for enabling entrepreneurs to optimally exercise their talents and to attain their personal and professional goals. In all successful economies, SMEs are seen as an essential springboard for growth, job creation and social progress. The labor absorptive capacity of the small business sector is high, and the average capital cost per job created is usually lower than in a big business. Historical evidence shows that most big businesses in Ethiopia started from micro/small/ informal level and grew over a long period of time. The small business sector is also seen as an important force: generate employment and more equitable income distribution, activate competition, exploit niche markets, enhance productivity and technical change and, through a combination of all of these measures, stimulate economic development.

The SME sector has also been instrumental in bringing about economic transition by providing goods and services having adequate quality and reasonable prices to a large number of people particularly in rural areas, and by effectively using the skills and talents of a large number of people without requiring high-level training, large sums of capital or sophisticated technology.

Country wide detailed and up-to-date information on SMEs is difficult to get. According to CSA (2002), there were 974,676 cottage/handicraft manufacturing establishments (of which, 616,696, or 63.3 per cent were in rural areas while 357,979, or 36.7 per cent, were in urban areas) engaging more than 1.3 million people of which, about 94.2 per cent were active owners, partners, or family

workers; and only 4.3 percent were hired employees. The Small Scale Manufacturing Survey (CSA 2003) also shows that there were 31,863 small-scale manufacturing industries (of which, 62.8 per cent were in urban areas) engaging 97,782 persons (91.3 per cent male, and 8.7 per cent female). Both created about 1.4 million employments during the year.

Following the increasing unemployment during the last decade, the government designed and implemented a SMEs strategy. SMEs are considered as the crucial sector which would address the unemployment problem witnessed in the country, especially in urban centers. In this respect, this study tries to assess the current state of SMEs, identify the constraints hampering its development and prospects.

During the last decade, unemployment in urban areas was getting rife. As a result, the government designed a development strategy to generate employment for the urban youth and disadvantaged groups, women and the poor. In spite of the huge expected contribution of SMEs particularly in terms of employment creation, there is very little empirical work on their developments, contribution and constraints to their development. To this end, an SMEs development strategy was designed and implemented. In an attempt to assess the performance of the strategy, EEA undertook research entitled, **SMEs strategy, performance, constraints and prospects** as its thematic issue in its 2014 annual economic report, the purpose of which is to attempt to bridge the observed research gaps in the sector and inform policy making.

This study is aimed at reviewing historical developments, SMEs policies, strategies, recent SMEs performances, constraints and prospects and suggests measures that would address the constraints hampering the development of the sector.

The report is organized into five chapters. The introductory part is followed by a review of historical developments of SMES and strategies pursued in the sector. Chapter six presents review of literature, chapter seven deals with the performances of SMEs. The eighth chapter identifies the constraints and prospects. The final chapter winds-up the report with concluding remarks and recommendations.

Definitions, Data Sources, Assessment Methodology and Limitations

Definitions

The literature gives different definitions of SMEs. According to the New Small & Micro Enterprises Development Strategy of Ethiopia, the working definitions of SMEs are based on the size of capital, number of people and the type of business. The sector encompasses the both the industrial and service sectors. The small Industrial sector includes manufacturing, construction and mining. It operates with 6-30 persons and/or with a paid up capital of total asset of Birr 100,000(one hundred thousand) and not exceeding Birr 1.5 million. The service sector on the other hand comprises retailer, transport, hotel and tourism, ICT and maintenance. It operates with 6-30 persons or/and total asset, or a paid up capital of Birr 50,001 and not exceeding Birr 500,000 (see Table 5.1).

Table 5.1: Classification of Enterprises by Size and Sector

Enterprise level	Sector	Hired labor	Capital, Birr
Micro	Industry	≤ 5	≤ 100000
	Service	≤ 5	≤ 50000
Small	Industry	6-30	≤ Birr 1.5 million
	Service	6-30	≤ Birr 500,000

Source: FDRE, 2011 Micro and Small Enterprise Development Strategy, provision

Framework and methods of Implementation (Approved) January, 2011, Addis Ababa, Ethiopia

Data Sources

Towards the achievement of its objectives, the study relies heavily on administratively generated secondary data and review of government policy and strategy documents, study reports and relevant literature.

This study has collected secondary data and reports from FMSEDA, MUCD, CSA, NBE, etc. In addition, data on SMEs from Oromia and Addis Ababa city administrations is included to see the rural and urban dimensions of the sector.

Limitations

A study of such rigor has to be based on reliable data and sound analysis methodology. Owing to lack of disaggregation in secondary data, primary sources are considered to be the most appropriate source to extract new information and explanation underlying the performance of SMEs. Accordingly, the study had planned to conduct a survey on SMEs and collect primary data from sample SMEs operating in the major urban areas. However, it was impossible to make it owing to a variety of reasons, the major being issues related with EEA's license renewal challenge.

Although it has attempted to elect some secondary data, some weaknesses were observed in the data in terms of detail, coverage and time series. This, however, has seriously limited the rigor of the study and its policy informing roles. Relentless effort was made to minimize those challenges and the study has managed to produce a report based on the secondary data collected from various public sources, mainly Federal Micro and Small Scale Development

Agency (FMSEDA), Ministry of Urban Development and Construction, Oromia MSED, AAMSEDA, and NBE.

In order to boost the comprehensiveness of the report, detailed data from Oromia regional state and Addis Ababa City Administration on SMEs performances was collected, analyzed and presented in the report. The Oromia data helps assess the rural dimensions of SMEs while the data from the Addis Ababa City Administration focuses on the urban dimension.

Chapter V

Review of the Literature

A number of theoretical models have been developed to describe the growth of small businesses. One class of theoretical models focuses on the learning process (active or passive), the others on the stochastic and deterministic approaches.

In the passive learning model, a firm enters a market without knowing its own potential for growth. It is only after entry that firms start learning about the distribution of their own profitability. By continually updating such learning, the firms decide to expand, contract or to exit. As a firm operates for a longer period, the owner's estimation of efficiency becomes more accurate. The implication of this theoretical model is that smaller and younger firms have higher and more viable growth rates (Goedhuys, 2002)¹⁰.

In the active learning model, a firm explores its economic environment actively and invests to enhance its growth under competitive pressure from both within and outside the firm. The potential and actual growth changes overtime in response to the outcomes of the firm's own investment, and those of other actors in the same market. According to this model, owners or managers could raise their efficiency through formal education and training that increases their endowments. Entrepreneurs or managers with higher formal education, work

¹⁰ Goedhuys Michelin (2002), Employment Creation and Employment Quality in African Manufacturing Enterprises, International Labor Organization, Geneva, International Labor office, National University of Kirk Methyl Academy, Ukraine, pp 24-29.

experience and training would therefore be expected to grow faster. The firm grows if successful, closes if unsuccessful (Goedhuys and Hardi, 2002)¹¹.

Evidently not all small businesses are growth oriented and for certain firms' growth is a voluntary choice (Masurel and Montfort, 2006). Kolvereid and Bullvag (1996) concluded that growth intentions may be used to predict actual growth, that past intentions are related to later intentions, and that change in growth intentions are associated with changes in growth patterns. Arbaugh and Sexton (1996) state that most new firms do not grow into large ones and that there is no relationship between the age of a firm and its size. Chaston and Mangles (1997) speak out that there is no single strategy to firm growth. Hence, the probability of achieving growth is increased by avoiding excessive emphasis on single-strategy transformation initiatives, and by giving different capabilities priority depending upon the development stage of the firm. They identified three factors that could limit the growth of small businesses to include ability, need and opportunity. Kolveired (1992) small business entrepreneurs who want their firms to grow start their business in order to achieve just that.

The process of mutual adjustment between proprietors and their employees was identified by Goffee and Scase (1995) as a major constraint to small business growth. Brown, Earle and Lup (2004), found strong evidence that access to external credit increases the growth of both employment and sales, while taxes appears as a constraint to growth. The data suggests that entrepreneurial skills have little independent effect on growth, once demand conditions are taken into account. The evidence for the effectiveness of technical assistance is weak: only assistance provided by foreign partners yields a positive effect. A wide variety of alternative measures of the business environment (contract enforcement,

¹¹ Goedhuys Michelin and Hardi Alan (2002). *Survival and Success in African Manufacturing Enterprises*. Center for Study of African Economies. University of Oxford, Oxford press, 12-16.

property rights, and corruption) are tested, but none are found to have any clear association with firm growth.

The other set of theories include the 'stochastic' and 'deterministic approaches'. The stochastic model (also known as the Gibrat's law) argues that all changes in size are due to chance. Thus, the size and age of firms has no effect on the growth of small enterprises. The deterministic approach assumes, on the contrary, that differences in the rates of growth across firms depend on a set of observable industry and firm specific characteristics (Pier, 2002).

Reducing unemployment and improving the standard of living has remained the top agendas of governments in LDCs, politicians, think-tank groups, donors, lending institutions, and researchers over the last four or five decades. As a result, economic theories and practices started to pop up with an objective of reducing unemployment and boosting citizens' income.

There have been attempts to address the concerns through different ways. Tackling issues of unemployment through the support and promotion of large scale manufacturing industries has repeatedly failed. This is because large scale manufacturing industries are characterized by larger demand for heavy machinery with relatively advanced technologies, high investment and working capital, and more skilled manpower, which are all in limited supply in developing countries.

Consequently, the promotion of labor intensive technologies considered to be the main strategy to address unemployment problems of both rural and urban residents and adopted by most developing countries. Promotion of micro and small enterprises (SMEs) has, thus, been one among those labor intensive endeavors adopted by countries (Ibid: 34). Realizing the contribution of SMEs, most governments in both less developed countries (LDCs) and developed countries (DCs) have been supporting SMEs extensively. The World Bank,

UNIDO, the Asian Development Bank and a number of donors have been supporting SME promotion policies.

In fact, most healthy economies exhibit an industrial pyramid where a few heavier industries exist at the top followed by a larger number of medium scale enterprises (which is gravely missing in developing economies, commonly known as “the missing link”) and very large numbers of small and micro enterprises exist and even very larger number of informal engagement. Therefore, promotion and support of large scale enterprises (equivalent to discouraging smaller and micro enterprises) is not a wise policy decision for least developing countries, which is overwhelmed by quite a large number of unemployed youth.

Curran (1996) presented a notion that growth is more than an array of factors and a need for broader perspective covering founders’ characteristics, innovation, and complexity of business environment in which SMEs operate. He also justifies that small business owners/ managers fail to formulate and adopt deliberate business growth strategies (they often formulate survival rather than growth strategies) because of the following three reasons. First, most owners/ managers of small business enterprises have no awareness and skills of developing business growth strategies/ plans; Second, owners/managers are not obliged to show a proof of long-term business growth strategies/ plans as small business enterprises have no or very few shareholders; Finally, most small business owners/ managers have limited exposure to formal business management skill training and such business growth strategies are adopted largely to minimize effects of external factors and most small business managers feel unrealistic as they often operate in risky business environment with little room of influence to minimize such risks. Instead, most small business owners depend on instinctive flexible management techniques actually different from deliberately designed long-term business strategies & plans. Often unplanned and accidental strategies are used by small business owners to cope with unexpected outcomes as strict adherence to

original strategies/ plans entails losing business advantages or incurring substantial loss.

The role of entrepreneurship in the development of SMEs is crucial. The differences in attitudes and abilities among individuals are critical issues in determining why some small firms grow and others do not. Knight (1921) described an entrepreneur as someone that has the willingness and superior ability to make decisions, raise capital and assume the risk of failure. In the same vein, Schumpeter (1939) added among other things, the fact that an entrepreneur has the superior ability to perceive new market opportunities. He sees the entrepreneur as an innovator.

According to Davidson (1989, 1991), firm growth is an indication of continued entrepreneurship. Davidson notes that economic theories take the willingness to grow a business for granted, by assuming profit maximization. However, empirical evidence suggests that small business owners are reluctant to grow even if there is room for profitable expansion and that profitable firms of different sizes co-exist within industries. According to Papadaki and Chami (2002), theories on small business growth and development view business growth from an organizational life cycle perspective, which sees growth as a natural phenomenon in the evolution of the firm. Other perspectives see growth as a consequence of strategic choice. It is obvious that attributes of the business owner, organizational resources and environmental opportunities are crucial in expanding the firm and in overcoming the barriers to the evolution of the firm from one stage to the next. Sexton and Smilor (1997), and Carland et al., (1984) distinguish between a business owner and an entrepreneur. According to them, an entrepreneur is committed to the growth of the business. Commitment to growth is what primarily distinguishes small business owners and entrepreneurs.

Choice of technology and innovative capacity is another important factor determining growth of SMEs. According to Moyi, E and Njiriani, P. (2005) production technology has passed through three paradigms: technological development, appropriate technology and technological capability¹².

According to Albu (2001:16) in Moyi, E and Njiriani, P (2005), it is divided into production, investment, and innovative/ adaptive capability. Production capability is the static knowledge and skill required to use existing machine, and investment capability is the capacity to identify and select. Technology development which is far less applicable to SMEs is the process of designing new machineries/ equipments/ processes/ products. The appropriate technology paradigm assumes SMEs as beneficiaries and not as active participant of development and improvements of technology; technology as a resource that can only be adapted by SMEs for improving factor productivity and reducing unit costs. It also focuses on incremental choice and suitability of available technologies to the production and market environment of SMEs operating in environment of unskilled and large labor market, low income consumer market, and low quality inputs. But appropriate technology paradigm is challenged for its limited impact and its failure to narrow gaps between SMEs and larger enterprises. The technical capability paradigm has emerged following unsatisfactory result with appropriate technology paradigm and with an objective to raise capacities of SMEs in making use of innovated technologies as most innovated technologies is adopted from separate workshops. It needs institutional, technical and engineering skills to adapt these technologies to different climate, raw materials and market demand.

Institutions have come to play an important part in the development of SMEs. Development thinkers and practitioners continue to search for sets of institutions believed to accelerate the process of social and economic

¹² Technological capability is defined as technical, managerial and institutional skills needed to use equipments and machineries properly. This capacity is often categorized in to processes and stages.

improvements. One institution that may emerge to neutralize market failures associated with high transaction costs and information asymmetry prevalent along the product value chain and sub-contracting practices are industrial clusters. Due to geographical proximity, supply of parts and components among SMEs would be facilitated as who wants what can easily be known.

The social capital theory believes the existence of social organizations where members are entitled to have access to resources and benefits based on standard practice. Resource allocation among members of a given social cluster and individual decisions are governed by the rules of the game. Social capital theory has been successfully used by micro finance institutions (MFI) in channeling and collecting credit to the poor farm and urban households (Thorbeche, 2000).

A growing body of literature on SMEs indicates that social capital has been one of the other essential inputs for the survival of the small enterprises. Close acquaintances, trust-based relationships, good friendships and networking have been among vital factors for the development of small entrepreneurs as well as in reduction of transaction costs and increase internal flexibility (Fafchamp, and Minton 1999; Fukuyama, 1995).

Institutions have come to play an important part in the development of SMEs. Institutions have been defined as a set of constraints governing the behavioral relations among individuals and groups. Nabli and Nuggent (1989) observe that institutions have the ability to govern the relations among individuals and groups. They are predictable, understood as either formal or informal, like labor unions, markets, contracts, as well as cultural rules and codes of conduct as different forms of institutions (Nabli and Nuggent 1989). The importance of institutions derives from the fact that economic actions take place in a social context. According to Grannovetter (1985), economic actions are embedded in social contexts. Hence an entrepreneur, being a socially embedded individual, will use

his personal networks for the benefit of the enterprise. The position of the person in the network and the power associated with the position determines the benefits of such networks to the enterprise. Networks of relationships shape the form that market exchange takes. Due to the externalities generated by networks, market entry is easier for members of a specific network than for others (Fafchamps 1999).

Linkages also speed up the growth of SMEs. Linkages can be classified into contracts, collaborations, contacts, and associations. It focuses on linkages among firms, rather than linkages as part of a wider network of social relations. The focus is mainly on economic relationships, but the non-economic aspects of the interactions are also considered in the context of how they affect the firm's activities. Both theoretical and empirical evidence suggests that specific social relations are among the factors that affect economic activities (Grannovetter 1985; Whitley 1992).

The small networks, typical of small scale enterprises, are often motivated by the desire to reduce risks while those by large businesses aim at enhancing business performance. While small networks may have marginal effects on enterprise productivity, it is the innovation networks that may have larger and significant impacts. The nature and relative importance of private and spillover effects also vary between small and large networks. Small networks tend to generate significant positive spillovers since within themselves it is difficult to exclude individuals from the benefits of the networks. Large networks to which large enterprises belong tend to generate high private returns (Barr 1998).

McCormick et. al, (2003) note that to survive in business SMEs need - in addition to their entrepreneurial skills - some lobbying activity for a friendly business environment. In most cases, SMEs find the tackling of such problems on an individual basis rather difficult, due to a variety of reasons. Belonging to

associations therefore becomes helpful. But although benefits to associations may seem obvious, research has shown that only a minority of the SMEs belong to any type of business support group (CBS et al 1999). Research on business systems (Oketch et al. 2002) shows that firms which are limited in resources, like small firms, may be constrained from joining any networks or having contacts due to the costs involved in such associations.

Firms link in order to attain ends that they cannot meet alone. Linking enables firms to overcome some of their constraints like lack of finance, access to raw materials, market information, and inputs or technology. Hence, one of the reasons why firms link and create relations is for the purposes of acquiring finance and other services. Small firms are mostly constrained by lack of working and investment capital. Linkage between firms can ease such constraints by reducing the amount of fixed capital required. Vertical linkages between producers and their suppliers may bring credit that reduces the working capital requirements. Linkages may also provide access to new sources of capital, like being members of group lending schemes. In such schemes micro enterprises join together to guarantee each other's loans.

Small firms may also link with large firms as a way of being able to access superior management capability, technology, market information, and finance that are important for firm survival (Meyanathan and Munter 1994). Linkages have a number of potential benefits to firms. They help improve firm performance by reducing marketing costs, increasing firm flexibility, improving skills and their diffusion, as well as facilitating information-sharing (McCormick and Atieno 2002). As a form of network they also help reduce uncertainties faced by enterprises. Limited linkages among the SMEs constrain their flexibility in taking up emerging entrepreneurial opportunities. This also contributes to inadequate technological transfer, poor information flow, weak subcontracting arrangements, and inadequate marketing opportunities as factors that can promote expansion.

Chapter VI

Historical Developments, Policies and Strategies

6.1. Historical Developments

The development of SMEs dates back to the 1940s & 1950s during which a number of reforms towards the sector were made. Later the Investment Proclamation No. 242/1966 provided SME's tax relief, access to land and buildings, public utilities and other facilitations of advisory and administrative nature (Teshome, 1994).

Proclamation No.76/1975, however, restricted acquisition of private businesses to a single license and capital ceiling set at Birr 300,000 for wholesale trade, Birr 200,000 for retail trade and 500,000 for industrial establishments.

In 1977, the Handicrafts and Small Scale Industries Development Agency (HASIDA) was established by Proclamation No. 124/1977. Its objective was to give further boost to the development of the public economy by encouraging cooperative development in the small scale sector. During the 1980's HASIDA achieved very little.

Following policy failure over two decades, the Derg, declared a new program of mixed economy development. At the end of the Derg regime, two declarations were issued: the Small Scale Industry Development Special Decree No.9/1989 and the Special Decree on Investment No.17/1990. Decree No.9/1989 allowed establishment of small-scale enterprises by business organizations, cooperatives and individual entrepreneurs. This decree replaced the restrictive Proclamation

No.76/1975 and unlike this proclamation, the decree allowed participation by the diaspora and raised the capital ceiling for small scale enterprises from Birr 500,000 to between Birr 2 and 4 million. Decree No.17/1990 on the other hand lifted the restriction of private sector participation to single license (by Proclamation No.76/1975) and allowed individuals to undertake investment in unlimited number of enterprises, and attempted to provide incentives to do so.

Further enhancement was given by the new Regulations No.8/1990 which was aimed at operationalizing the above decrees. According to the Regulations, prospective investors in the SMEs sector were required to have a temporary license which permitted completion of the establishment phase of their projects and eventually own permanent license when the investment reached the production phase.

Proclamation No.41/1993 which provided for the establishments of Industry and Handicrafts Bureaus in the Regional Governments has replaced the HASIDA proclamation (Proclamation No.124/1977). Nonetheless, it has to have a lasting impact on the status of SMEs development in the country. The issue of temporary licenses proceeded without restraint and at a nominal charge and as a result such licenses were oversold. Individuals obtained the temporary licenses to take advantage of access to land; public utilities and credits that such license were expected to give them. However, these temporary licenses failed to graduate to permanent license holding and were unable to get access to land, utilities and credits as they expected (Teshome, 1994: p.37).

To enhance the operation of SMEs licensing and supervision of micro financing institutions Proclamation No. 40/1996) was issued, the principal aim of which is to enable SMEs access credit facilities, counseling services and income generating projects through micro-finance institutions.

More recently, a number of proclamations have been issued by the government with the purpose of promoting and developing the sector.

6.2. SMEs Policies and Strategies

For a sector to continue benefiting the economy in a sustainable way, it has to be guided by policies and strategies, which are informed by an in-depth and comprehensive study. SMEs development policy and strategy should be compatible with other development policies and strategies implemented for the overall development of the country. In this connection, the government of Ethiopia issued the National Micro and Small Enterprise (SMEs) Strategy in 1996/97. Until 2004/2005, the national strategy was implemented only at national level. Cognizant of the need to stretch to regions, the government established SMEs coordinating bodies at all regional states, even extended to zonal/district level, in 2004/05.

Two SME strategy documents came into attention most recently .These are SME Development Strategy of 1997 and SME Development Strategy of 2011

Evaluating the previous strategy, the SME Development Strategy formulated in 1997 clearly enlightens a systematic approach to alleviate the problems and promote growth of enterprises. The primary objective of the SME development strategy was to create enabling environment for SMEs to operate. The specific objectives of the 1997 strategy framework were to:

- facilitate economic growth and bring equitable development;
- create long term jobs;
- strengthen cooperation between SMEs;
- provide the basis for medium and large scale enterprises;
- promote export; and
- balance preferential between SMEs and bigger enterprises.

The new SME Strategy (2011) included a fresh band of target groups, the graduates, (in addition to its classical emphasis on the poor and less skilled people) to form cooperatives and create their own jobs. On top of providing jobs to the people, the establishments are also hoped to bring about the technological transfer and new corporate management skills to the nation.

In the new strategy a new set of priority areas are also identified. These are the manufacturing sector that encompasses the majority of the previously identified areas, the service sector which is a relatively new one, construction sector and the urban agriculture sector & the retail sector. The other new and important concept raised in the new SME strategy is the stage of growth of the SMEs. According to this strategy, the supports that these enterprises receive depend upon their level of growth and are relatively tailored one. The stages are: the start-up stage, the growth stage and the maturity stage. The strategy further outlined the criteria which qualifies SMEs into any of these classifications.

6.2.1. SMEs Development Strategy

Federal Micro and Small-Scale Enterprises Development Agency (FMSEDA) and Regional Micro and Small-Scale Enterprises Development Agencies (RMSEDAs) were established by the Council of Ministers of Ethiopia Regulation No.33/1998, and supportive financial sector reforms were made. Among the principal objectives of the FMSES and RMSES are exploitation of local raw material, creation of productive job opportunities, adoption of new and appropriate technologies, and enhancement of the development of SMEs which have wide-ranging backward and forward linkages.

FMSEDA is a federal government institution established by regulation No. 33/1998 on April 3/1998. The agency has its own legal personality & is led by a board of management constituted from government organizations, educational

institutions & the private sector. It is directly accountable to the Ministry of Trade & Industry of Ethiopia.

The major objective of FMSEDA is to encourage, coordinate & assist institutions engaged in service provision to the development & expansion of Micro & Small Enterprises in the country at large. In order to promote micro & s Small enterprises, the agency establishes a coordinated working relationship with regional government organs, regional agencies responsible for SME development, NGOs & the private sector.

The major objectives of SME development is creating job opportunities, bringing equal development, improving income of the society and poverty reduction; enabling the sector to be competent, facilitate economic growth and lays foundation for industrial development; and expanding the sector's development in urban areas by creating developmental investors.

The various development plans implemented have given focus for the development of SMEs. In order to operationalize FMSEDA and RMSEDAs and address the major problems constraining SMEs development, the government issued an Industrial Development Strategy in 2003, which was aimed at providing a package of material and technical support to the SMEs including, inter alia, provision of utilities and infrastructure, raw materials, access to credits, etc.

The Plan for Accelerated and Sustained Development to End Poverty (PASDEP) identified development of SMEs as a venue for job creation and to mitigate the pervasive youth unemployment observed in the country. According to PASDEP, SMEs would get extended basic training, upgraded business development services and enhanced market linkages with foreign importers through FMSEDA and RMSEDAs in the planned period. GTP (Growth and Transformation Plan), has also given priority to SMEs development.

6.2.2. Strategic Directions¹³

During the GTP implementation period, the enabling conducive environment for the emergence of new SMEs and improvement in the productivity of the exiting SMEs will be put in place.

SMEs Target¹⁴

SME development is the key industrial policy direction contributing to the envisaged structural transformation of the economy. The overall objective and key government policy direction for this sub-sector is to expand the quantity and quality of SMEs. The major targets to achieve this objective and implement the policy direction are providing:

1. Comprehensive support to SMEs so that they create employment opportunities for about three million people.
2. Training of trainees for 10000 professional in the sub-sector.
3. Capacity building and basic skill training for about three million operators in the areas of entrepreneurships, technical and vocational skills.
4. 15 000ha of land for working premises and conduct shade and buildings for SMEs.
5. Micro credit and marketing information and work with producers to identify bottlenecks and give support where solutions are identified.

¹³ This section draws heavily on MoFED, (2010), Growth and Transformation Plan (GTP), November 2010.

¹⁴ ibid

Implementation Strategies¹⁵

One of the strategies to be pursued in promoting SMEs development would be strengthening the regulatory and policy environment such that the environment may nurture entrepreneurs and competitiveness.

The promotion of SMEs development will take into account the different stages of development of the enterprises. The support provided will vary depending whether the enterprises are at starting, growth or maturity stages of development. Yet the strategy will particularly encourage enterprises that display entrepreneurs, and that are becoming more and more competitive. The second strategy concerns promotion of savings. Training and complementary support will be provided to encourage savings and increase the capital of SMEs employers and employees. Accountable, efficient and transparent mechanisms will be put in place to enable the provision of credit to SMEs. In addition, mechanisms will be put in place to help SMEs with access to production and marketing premises to ease their capital problems.

Continuous training and awareness creation initiatives will be delivered to SMEs owners to nurture their entrepreneurs. There will be further expansion of the industrial extension service in urban areas to improve the productivity and competitiveness of SMEs. The TVETs will provide training service as skill and technology centers and support SMEs through technology transfer and improvements and business counseling. The Government will put in place supportive market mechanisms such as export incentives, linking SMEs to medium and large scale manufacturing industries and access to agricultural outputs for SMEs production inputs.

¹⁵ ibid

Cluster Development¹⁶

Clustering provides SMEs with several benefits. The advantages accrued to microenterprises through agglomeration or clustering is termed as “collective efficiency” that would enable even the poorest and most vulnerable cottage industry producers to become competitive in a wider market through proximity, low ‘search and reach’ costs, specialization, social cohesion and collaboration (Schmitz & Nadiv, 1999).

Cognizant of its importance, Ethiopia has adopted a cluster development programme on some selected SMEs. It was introduced and implemented during 2005-2009. Under this program, four SMEs clusters have been selected as beneficiaries of technical assistance: footwear, handlooms, ready-made garments in Addis Ababa, and wood works in Mekelle, Tigray.

6.2.3. Direction of SMEs Development¹⁷

General Direction of Development

- While the short term program is to ensure fast development by saving capital and thereby benefiting the society from the development, the medium and long term plans are targeted at serving as a source of investors and time for entering to sustainable and fast growth cycle by strengthening technology and capital ability.
- SME plays a decisive role in solving unemployment by creating developmental investors who contribute in creating industry and by building up

¹⁶ Schmitz, H., and Nadvi, K. 1999. Clustering and Industrialization, World Development, 27 (9), 1503-14.

¹⁷ This section draws heavily on, Government of the Federal Democratic Republic of Ethiopia (2011), Micro and Small Enterprise Development Strategy, provision framework and methods of Implementation (approved), January 2011, Addis Ababa, Ethiopia

developmental political economy in urban areas. The government thus will give prior attention to SME's development in the industry and urban development sector.

- SMEs will provide job opportunities to those graduated from university and TVET by developing youth's skill and innovation, perception and improving their saving culture
- To realize human resource and technology development, the TVET institution will take the task of industry extension service in ownership right based on the direction of industry development strategy.
- The sector will be developed by integrating with agriculture, medium and higher industry.
- A system of improved development strategy, definition and support framework based on career will be formulated.

Directions of Human Resource Development and Technological Growth

Ensuring the HRD and technological growth of SME is the responsibility and function of TVET centers. The centers serve mainly as:

- technology institutions that support SME development based on technology transfer;
- actors to develop entrepreneurs, solve skill problems and develop managerial skills, providing training and consultancy services and technology information sources and development;
- technological support bodies and transfer products that can be produced by the sector especially by recognizing, sampling and producing products that substitute imported commodities;

- Institutions making clear intention that the objective is creating industrialists who run the country's development by organizing the educated youth and the youth in general;
- creating wide ranging change in perception through trainings given by educational institutions, and activities exerted by youth association and families;
- developing a sense of self initiation to the youth by giving due attention for developing entrepreneurship thought and knowledge, and making them free from dependency; and
- not only centres for job creation but also for upgrading and transferring technology, and expansion of modern management system.

Source of Finance and Direction of Supply

- Actors of the sector are encouraged to play a role by saving initial capital.
- For startup initial capital, families and firms themselves are responsible for saving. Job opportunities created by the government are primarily given to startup firms. In the process the federal, regional and town/city administrators work jointly in order to facilitate credit services.
- Institutions that facilitate supply of finance and lease machine will be strengthened; and facilitated saving and credit system that encourages machine investments/lease/ in special means will be promoted.
- Youths who came with technologies and project ideas that derived from education institutions, or from themselves and those are interested to engage in the sectors will get initial capital credit.
- Regions and urban administration will construct business centers and organize market centers in order to save cost of capital investment. They also facilitate access to get working site within these centers or/and out the centers on fee/rent basis of/.

- Access to get credit will be facilitated when various technologies and project ideas are produced and have relevance for the designed development policy and strategy.
- Considering government development program as one of the tools for solving financial constraints enterprises who participate in the program will be supported with lease machine and raw materials’.

Directions for Production and Sales Center Supply

- Local administrators and municipalities would use and implement cluster development as one of the main development directions in order to resolve bottle necks of production sites to promote technology supply, create market opportunity and solve capital constraints, and supply production and sales center in fair prices.
- Enterprises that are recognized as strong enough to transfer to medium level will be supported by facilitating working sites in advance, credit and sustainable market thereby to contribute significantly to industrial development of the country.
- The sector would be provided in special cases in order to serve as a source of incubation for industrialist of the country.

Directions of Market Development

- Access to market information system will be facilitated to those who are engaged in the sector and in export products too.
- Access to market opportunities will be facilitated by establishing various marketing systems, and to encourage and strengthen their marketing capacity by organizing them in association and group.

- Enterprises that can produce commodities/products in such a sector for both domestic and international market, and ensure technological transfer will be supported to expand in all towns/cities.
- Various forms of market linkages in sub-contracting will be expanded

Directions of One Center/Shop Service

- Undertake information/data registration system of job seekers and then identify those who are engaged/employed or not.
- Provide support that enable enterprises to be effective when they are organized by fulfilling legal requirement individually and collectively and who begin business either in cluster or out of cluster from their own initial capital, or credit.
- Provide sustainable capacity building to experts of one center service so as to enhance their initiation/ morale and to have working ability and holistic personality.

Directions of the Industry Extension Service

- Industry extension service will be given to SME by TVET institutions.
- TVET institutions will work jointly with other supporters of the sector so as to improve the modern management capacity & technological level of the SME, and to expand and make ready the industry extension service.

Strengthen Support Providers

Various capacity building activities will be undertaken in order to make development of the sector sustainable and bring about developmental investor and create industrialists, to strength capacity of governmental support providers and executive of the sector.

Creating Enabling/ Suitable/ Working Environment

- Government and political leaders found at various levels facilitate to solve SME challenges up on study and through providing political leadership.
- Government support will be based on SME interest and avoids the dependency out look
- The supports given to SME at various levels will be targeted at bringing about legal system

6.2.4. SME Development Support

Most SMEs do not have the capacity to establish and run their own SMEs. Cognizant of these problems, the government has designed and provided packages of supports programs. The extent of the support varies from one SME to another depending on their role in the economy. According to the strategy document, growth-oriented sectors receive **Maximum Support** while the rest get **Minimum support**.

The criteria which are used to identify growth-oriented SMEs include:

1. large market size for their product,
2. employment absorption capacity,
3. short return period for investment,
4. local raw material utilization,
5. high role for poverty reduction, and
6. opportunity to transform to medium and large scale industry.

The identified growth-oriented SMEs are further disaggregated by sectors and sub-sectors. These include:

Manufacturing sector: Metal & engineering, textile and garment, leather products, wood work products, agro processing and handicraft products.

Construction sector: Contractors, building material production, cobble stone production, traditional way of mining extraction.

Urban agriculture: Cattle fattening, honey production, forestry, poultry farm, animal food preparation,

Trade sector: domestic product whole sale and retail trade

Service sector: Solid waste collection and recycling, maintenance service, etc...

The maximum support package includes:

- working premises with least leasing price,
- product display center with least leasing price,
- technical and business management training,
- counseling service,
- loan provision,
- market linkage particularly with government development programs (e.g. Housing development),
- exhibition, trade fair organization, and
- access to technology,

The minimum support package includes:

- loan provision,
- exhibition, trade fair organization
- technical and business management training, and
- counseling service

There are also tax incentives and Model enterprises and best practice expansion program. The tax package allows SMEs to have the privilege of tax exemption for the first three years.

Support based on SMEs development levels¹⁸

The SMEs development strategy document has identified three levels of SMEs growth. These include start-up, growth and maturity levels.

i) Supports provided at start-up level:

Definition

Start up level refers to enterprises that incorporate people who are interested to establish SMEs and those who fulfill the required professional skills from various institutions and recognized legally either in the form of an association or private. It is a level where an enterprise begins production and service under legal framework or legal entity.

Major problems

- a) Lack of access for initial capital/start-up/ to run business.
- b) Failure in searching and providing alternatives for SMEs to be organized on the basis of their interest as the act of organization is carried out through cooperatives.
- c) Most enterprises exit from business and develop the spirit of despair at start up stage as they have no basic knowledge on book keeping and business skill that help enterprise manage effectively

¹⁸ This section draws heavily on FDRE, 2011 Micro and Small Enterprise Development Strategy, provision framework and methods of Implementation (Approved) January, 2011, Addis Ababa, Ethiopia

Solutions and future directions

The following supports are provided to solve challenges at start up level

- a) Facilitate initial capital
 - implement a system that encourage people who are interested to establish SMEs to have saving and then facilitate credit in advance;
 - encourage families to facilitate saving support to their children who graduate from TVET and Universities;
 - implement a system that enables new comers to business to save for initial capital and to benefit from government projects and programs.
- b) Legalizing of SMEs
 - provide support to those that are ready to be organized legally based on their choice;
 - identify all types of SMEs as legal tax payers;
 - support enterprises to have legal license and to run business on legal basis.
- c) Improve entrepreneur business management and book keeping
 - enable enterprise to have basic business management and entrepreneurship skill;
 - provide basic book keeping training, prepare bookkeeping manuals and help to use the manuals.
- d) Provide skills and technical training that enable SMEs to start business and enhance their productivity and qualities.

ii) Support at growth level

Definitions

An enterprise is said to be at growth level when it becomes competitive in price, quality, supply, and profitable using the support provided. At this level, the

enterprise's manpower and total asset is larger than at startup level and use a book keeping system.

Major challenges

- a) Lack of financial support on the basis of the business nature, credit as there is no access to collateral.
- b) Lack of consistent and integrated technology and skill that help to enhance and improve productivity, quality and standard.
- c) Lack of access to manufacturing and sales center.
- d) Developing a sense of rent seeking attitude and failure to run business on legal basis.

Solutions and future directions

The following support is provided to solve the challenges.

- a) Facilitate financial support
 - provide sustainable credit service and on the basis of their business nature that can makes them competitive;
 - support enterprises to use the loan properly and effectively;
 - support enterprises in preparing business plan for credit.
- b) Skill and technology support
 - providing skill enrichment/development and technology support on market demand basis;
 - support SME to get business certificate of excellence to be consistently competitive;
 - competent at market;
 - improve their ability by facilitating access to managerial training on study basis

- support in implementing management of quality and productivity on product and services;
 - support and create market linkage;
 - expand of production and sales centers;
 - facilitate working and sales sites on SMEs business nature;
 - provide sites on a fair basis;
 - facilitate conditions where SMEs can use heavy machines in common that are not affordable for them individually.
- c) Enabling to be legal
- support enterprise to work under a legal system/framework/;
 - support to pay tax regularly;
 - enforce enterprises to fulfill national and international standards in order to be competitive;
 - in the markets.

iii) **Support at maturity level**

Definition

Maturity level comes when an enterprise is able to be profitable and invest further by fulfilling the definition given to the sector and using the support provided.

Major problems

- Failure in keeping up productivity and quality of product in order to be competitive.
- Lack of knowledge in an international standard products and production system.
- Limitation in technological ability and factors of production that ensure competency in the markets.

Solutions and future directions

- a) Creating competitive enterprises
 - establishing systems that help to improve quality and productivity;
 - support in market expansion;
 - support enterprises to produce new products so as to be competitive;
 - making entrepreneur to use modern and international standards in their sector.
- b) Identify and support lease machine that help enterprises to shift from growth to medium level.
- c) Certify the transition from small to growth and medium scale enterprise

iv) Support at growth medium level

- An enterprise is said to be transformed from small to medium level of growth when it is able to be competitive in price, quality and supply using the support given to the level.

Challenges/Constraints Facing the Sector

As the past experience shows successful enterprises have been confronted with challenges in transforming from small to medium level. One of the reasons for is this is lack of incentives and support that fits their business. Although it is possible to identify the challenges through research/study, the following are some of the obstacles.

SME that are organized under cooperatives are free from profit tax and this hinders their benefit.

- a) They lose benefits from production and sales cluster.

- b) Access to credit is limited as it is associated with collateral, and MFIs do not provide credit.
- c) Inconsistency of benefits from government purchase.
- d) Inconsistency with human resource development and level of teaching growth acquired from TVET.
- e) Strict control with having bookkeeping, audit report and with VAT and paying tax.

Solutions and future directions

In order to solve the above mentioned challenges, the following solutions and directions are forwarded.

- a) Support will be provided to those transfers from small to medium level institution at industry zone, in terms of building for production and sales or in lease. Business and development banks would facilitate credit and foreign currency to the enterprises.
- b) Implementing service provision systems that create transparency
- c) Developing and Implementing taxpaying registrations from the first year, and they became free from tax for the next 3 years when they undertake the transfer.
- d) Applying registration of business license at all levels of enterprises and closing the door for those business run illegally.
- e) Facilitating production and sales sites rent at fair prices, build industry zones at all regional cities/towns before they leave the centers.
- f) Facilitate special credit system to growth medium enterprise from CBE and the Ethiopia Development Bank /EDB/ so as to help expansion of business to strengthen capital and material capacity, and to solve currency problems.
- g) Improving service provisions that help use equal government procurement and sub contracting.
- h) Facilitate HRD and technological growth support at sectoral institutions and at establishing technology institutes/universities/.

Chapter VII

Structure and Performances of Small and Micro Enterprises (SMEs)

Attempt is made in this chapter to assess the recent performances of SMEs at national, regional (only Oromia Regional State) and City (Addis Ababa) levels to the extent that data allows.

7.1. Performance at National Level

The Growth and Transformation Plan (GTP) envisages creating a total of 3 million Micro and Small-Scale Enterprises (SME's) at the end of the Plan period. The sector is believed to be the major source of employment and income for the unemployed segment of the society in general and the urban youth in particular. It is also important in terms of entrepreneurship development.

7.1.1. Structure of SMEs

7.1.1.1 Contribution of Manufacturing SMEs to GDP

It is difficult to obtain information on the value added of all SMEs operating in the economy since national accounts statistics are not compiled along its structure. SMEs operate in all the sectors of the economy- agriculture, industry and services. However, value added of SMEs can only be obtained only on the manufacturing industries.

The small scale and cottage industries which can be taken as SMEs in the manufacturing sector have been growing, on average, by 6 percent for the PASDEP period. However, it has grown by 4.8 percent during the last three GTP implementation years which is lower than the preceding plan period despite heavy promotion activities. Moreover, manufacturing SMEs have been growing by a rate slower than the growth by medium and large scale manufacturing industries over the last decade (see Table 7.1).

The share of manufacturing SMEs in the total GDP has declined from about 1.6 percent in 2004/05 to 1.3 percent in 2012/13. Despite the significance of their number in the country, their share in the GDP is lower than the share of the few medium and large scale manufacturing industries throughout the period (see Table 7.1).

Table 7.1: Value Added, Real Growth and Share in %

Industry\Year	2004/05	2005/06	2006/07	2007/08	2008/09	Base year, 2009/10	PASDEP, period average	2010/11	2011/12	2012/13	GTP 3-Year Average
Real Value Added, growth in %											
Manufacturing Small Scale and Cottage Industries	12.8	10.6	8.3	10.3	9.1	11.6	9.98	12.1	11.8	10.8	11.6
	15	4.9	6	5.6	6.4	7	5.98	7.2	4.2	3	4.8
Value Added, share in %											
Manufacturing Small Scale and Cottage Industries	4.0	4.0	3.9	3.8	3.8	3.8	3.9	3.9	4.2	4.2	4.1
	1.6	1.5	1.4	1.4	1.3	1.3	1.4	1.2	1.4	1.3	1.3

Source: MoFED

7.1.1.2 Small Scale Manufacturing Industries

Based on available data on small scale manufacturing industries, an attempt is made to see the share of the various sub-sectors within the small scale manufacturing industry category. The relative importance of each sub-sector can be shown based on different indicators such as the number of establishments, employment, value added, etc. According to 2007/08 survey report, about 53.2 percent of the small scale enterprises are grain mills; 10 are enterprises which produce chemical and fabricated metals while the rest are involved in producing consumer goods. SMEs involvement in the processing of metal/spare parts and chemical and raw materials help establish and strengthen the linkage between the SMEs and the medium and large manufacturing industries (see Table 7.2).

Table 7.2: Small Scale Manufacturing Industries, Indicators for the year 2007/08

	No. of Establishment	Persons engaged	Gross Value of Production(GVP)	Value Added, in birr	Raw materials, total cost in birr	Imported raw materials, in birr	Energy consumed, in birr	Industrial cost, in birr
Food Products Except Grain Mill services	1,541	4,748	308,346,153	57,255,451	232,168,218	7,215,580	7,317,015	244,092,749
Grain Mill Services	23,047	70,023	1,113,873,376	479,699,504	211,902,453	35,117,721	285,999,885	602,792,947
Textiles	1,366	2,792	39,110,832	19,621,876	14,896,197	9,404,614	771,271	16,652,247
Wearing Apparel, Dressing and Dyeing of Fur	3,097	6,590	115,655,245	60,584,805	45,090,494	32,753,802	2,020,312	47,955,037
Luggage, Handbags and Footwear	46	167	4,370,821	1,482,397	2,662,326	601,978	44,917	2,730,254
Wood and Products of Wood and Cork Except Furniture; Articles of Straw and Plaiting Materials	90	350	7,819,873	3,072,214	4,137,873	288,481	261,539	4,436,767
Manufacture of Paper and Paper Products	3	12	103,635	56,424	21,864	20,864	4,247	28,561
Publishing, Printing and Reproduction of Recording Media	755	1,715	29,055,792	7,486,315	13,287,578	7,291,953	1,004,896	15,568,599
Manufacture of Chemicals and Chemical Products	6	37	636,322	198,287	364,432	67,400	37,178	402,710
Manufacture of Other Non-Metallic Products	457	2,498	116,877,481	56,288,440	52,264,324	5,736,238	984,503	56,129,465
Manufacture of Fabricated Metal Products, Except Machinery and Equipment	4,355	15,301	419,600,595	178,086,816	213,742,974	110,974,008	8,989,342	225,383,132
Manufacture of Machinery and Equipment N.E.C.	-	-	-	-	-	-	-	-
Manufacture of Parts and Accessories for Motor Vehicles and their Engines	8,575	34,718	635,850,091	277,872,921	305,505,474	94,566,780	15,708,030	327,558,986
Manufacture of Furniture; Manufacturing N.E.C.	43,338	138,951	2,791,300,216	1,141,705,450	1,096,044,207	304,039,419	323,143,135	1,543,731,454
Total	43,338	138,951	2,791,300,216	1,141,705,450	1,096,044,207	304,039,419	323,143,135	1,543,731,454

Source: CSA, Survey Report on Small Scale Manufacturing Industries, 2007/08

7.1.2. The Recent SMEs Performances

7.1.2.1 Number of SMEs

The Growth and Transformation Plan envisages creating a total of three million Micro and Small-Scale Enterprises (SMEs) at the end of the Plan period. According to the Federal Micro and Small Enterprise Development Agency (FMSEDA), a total of 70,455.00 new SMEs were established in 2011/12 employing 806,322.00 people across the country¹⁹. Compared with the target set in GTP, the registered performance is low thereby requiring government's utmost effort.

As there are SMEs graduating into medium size enterprises, there are also those dying ones due to a variety reasons. These developments tend to reduce the number of SMEs operating across the country and the size of employment generated in the sector.

7.1.2.2 Employment

Of the arguments in favor of the promotion of SMEs, the creation of employment for urban youth is the major one. According to FMSEDA, jobs created by SMEs have been growing since 2010/11. The total number of jobs in 2010/11, 2011/12, 2012/13 and the first 9 months of 2013/14 were 289 thousand, 806.3 thousand, 1223.7 thousand and 963.8 thousand, respectively. The biggest size of employment is generated by the construction sector, accounting for instance for 39.4 percent of the total employment in the sector, in 2012/13, followed by service sector. The problem with employment in the construction sector is its temporary nature (see Table 7.3).

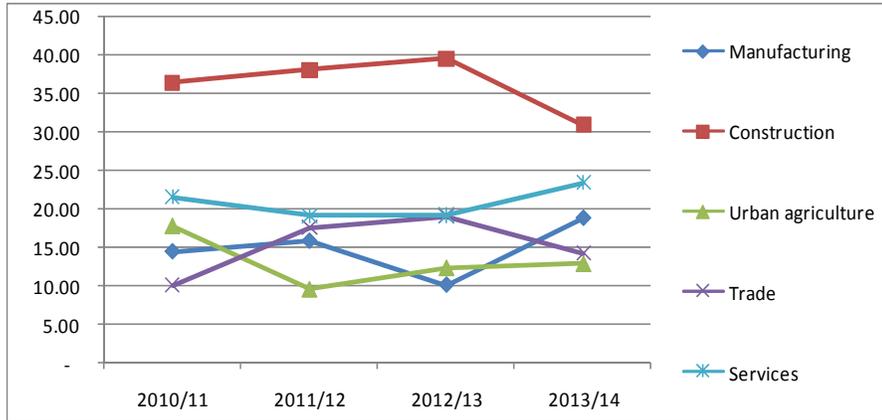
¹⁹ Data obtained from FMSEDA,

Table 7.3: Trends in the Employment in SME by sector

Sector	2010/11	2011/12	2012/13	2013/14
Manufacturing	41,564	27,058	123,060	180,413
Construction	104,922	306,768	482,600	297,425
Urban agriculture	51,305	77,144	150,914	123,907
Trade	29,135	141,468	232,552	137,336
Services	62,116	153,884	234,553	224,725
Total	289,042	806,322	1,223,679	963,806
Regular	289,042	806,322	1,223,679	963,806
Project	362,324	485,259	797,995	750,117
growth in %				
Manufacturing		205.69	(3.15)	46.61
Construction		192.38	57.32	(38.37)
Urban agriculture		50.36	95.63	(17.90)
Trade		385.56	64.38	(40.94)
Services		147.74	52.42	(4.19)
Total		178.96	51.76	(21.24)
Regular		178.96	51.76	(21.24)
Project		33.93	64.45	(6.00)

Source: FMSEDA, various report

Disaggregation of SMEs by sub-sectors enables us to see the relative importance of each sub-sector. It also enable us to judge whether the performance is going as planned in meeting the other objectives, other than job creation, such as facilitating technology transfer, creating and strengthening linkages with medium and large scale industries, etc. According to the data, the biggest employment has been generated by the construction sector, accounting on the average for about 36.2 percent over the four GTP implementation years, followed by services with 20.8 percent, trade with 15.2 percent, manufacturing with 14.7 percent and urban agriculture taking 13.1 percent over the four GTP implementation years. (see Figure 7.1)

Figure 7.1: The Employment Generated by SMEs, share of sectors in %

NB: - Data for 2013/14 is only nine months performance

Source: FMSEDA, various reports

The biggest issue which requires close scrutiny is the sustainability of the established and operating SMEs. Unless the established enterprises continue graduating to higher scales or at least survive, unemployment will increase. The major factor challenging the sustainability of SMEs is the rising living condition in urban centers. This is because the income that is generated by the majority of SMEs fall short of covering the basic expenses of those operating small businesses in urban areas thereby compelling them to close down and search for other better paying jobs.

7.1.2.3 Working Premises

Working premises are considered as the major factor in running businesses in urban areas, especially for small businesses with little initial capital. For SMEs getting space where they produce and sale their products is difficult and when available it is very expensive. In order to address these problems, the

government has been constructing working and selling places for SMEs operating in different sectors and towns throughout the country.

According to FMSEDA, about 292 buildings have been constructed during the last four years and more are under construction. In addition to buildings, the numbers of shades have increased from year to year over the same period (Table 7.4). Though these endeavors are helpful in addressing one of the major problems facing SMEs, the supply is very low in the face of high number of SMEs in operation in different sector across the country.

Table 7.4: Working Premise

Production and Sales place	2010/11	2011/12	2012/13	2013/14, 9 months
<i>Prepared place, in sq m</i>	4,727,407	8,355,131	19,181,400	14,460,887
<i>Building</i>				
<i>Completed</i>	65	74	145	8
<i>Under-construction</i>	41	200	108	267
<i>Shade</i>	1,854	1,806	3,985	4,685

Source: FMSEDA

As discussed above, working premises have been getting expensive, especially those located at major urban market areas. This, in turn, may tempt the SMEs operators to rent out their working premises for other businesses with financial capacity and business experience and end-up compromising the objective of creating sustainable employment and addressing income inequality problems.

7.1.2.4 Credit to SMEs and Repayments

The initial capital for SMEs emanate from diverse sources, the major one being loans. Since most SMEs lack the initial start-up capital, facilitating access to loan would definitely help establish new SMEs and address working capital problems of

existing ones. All those SMEs which have accessed loans for their businesses may not repay as scheduled due to a variety of problems. These include, taking of below optimal level of loan for that particular SME and the debt repayment schedule. The repayment schedule which compels SMEs to settle their debt immediately reduces the working capital and hence affects their smooth operation.

According to FMSEDA, total savings mobilized by MFIs and loan extended to SMEs by the same institutions has been increasing during the first four GTP implementation years. In the first 9 months of 2013/14, for instance, Birr 3.6 billion is mobilized in saving and Birr 2.4 billion provided in loans to the various SMEs operating in the economy depicting a loan to saving ratio of 65.4 percent. This is remarkable achievement in this short period of time. The loan repayment performance, however, has declined from 89.6 percent in 2010/11 to 65.4 percent in 2013/14. This could be due to provision of big size loans per enterprise and longer repayment schedule recently (Table 7.5).

Table 7.5: Savings, Loans and Loan Repayment by SMEs

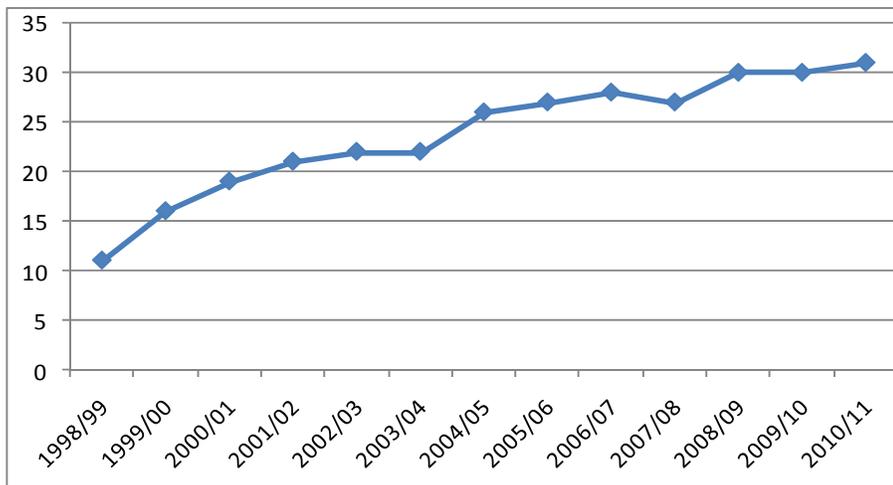
	2010/11	2011/12	2012/13	2013/14, 9 months
Value in '000 Birr				
Saving	318,000	1,455,527	3,418,360	3,598,927
Total Loan	994,087	1,088,137	2,725,091	2,355,337
Loan repayment	890,316	741,675	1,761,423.22	1,602,021.32
Enterprises, in No	135,897	81,744	77,451	135,561
share in percent(unless otherwise indicated)				
Loan repayment/Total Loan	89.6	68.2	64.6	68.0
Total Loans/Saving	312.6	74.8	79.7	65.4
Total Loans/Enterprises, share	7.3	13.3	35.2	17.4

Source: FEMSEDA

7.1.2.5 Micro Finance Institutions (MFIs)

Though not limited to them, the major lenders to SMEs are MFIs. Obviously, large scale commercial banks do not normally extend loans to SMEs due to high transaction costs and inability of SMEs to fulfill the collateral requirements of big banks. Figure 7.2 shows the trends in the number of MFIs mobilizing savings and extending loans to the various SMEs operating in different sectors across the country. The number of MFIs has increased from 11 in 1998/99 to 31 in 2010/11 depicting slower growth in the face of the mushrooming of SMEs in the country. Some of the MFIs have been growing to big banks thereby mobilizing huge resources and extending larger loans to the bank of SMEs.

Figure 7.2: Trends in the Number of MFIs



Source: NBE, Annual report, Macro-economic and Social Indicators

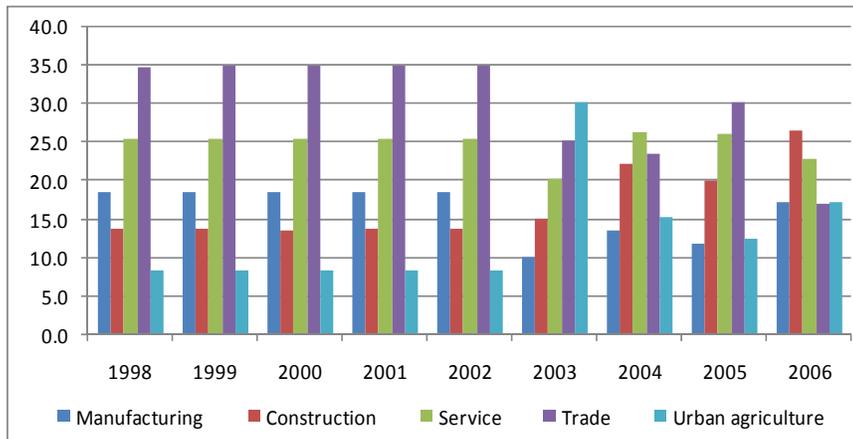
http://www.nbe.gov.et/pdf/annualbulletin/Annual%20Report%202010-2011/Macro_Economic%20and%20Social%20Indicators%20 (2010-11)

7.2. Performance at Regional Level: Oromia Regional State

i) Number of SMEs

There has been aggressive promotion for the development of SMEs in the Oromia regional state. Accordingly, the number of enterprises and the employment generated has been increasing since recently. Over the period 2005/06-2009/10, the shares of each sector in the total number of enterprises remain the same depicting absence of dynamism in the sector. From 2010/11 onwards, however, the share of each sub-sector started to change. For instance, over the period 2010/11-2013/14, trade, service, construction, urban agriculture and manufacturing sectors constitute, on average, 23.8 percent, 23.7 percent, 20.8 percent, 18.6 percent and 13 percent, respectively. This shows that enterprises are concentrated in service sectors rendering urban agriculture and manufacturing lower shares (Figure 7.3).

Figure 7.3: Trends in the Number of SMEs by Sector, share in %

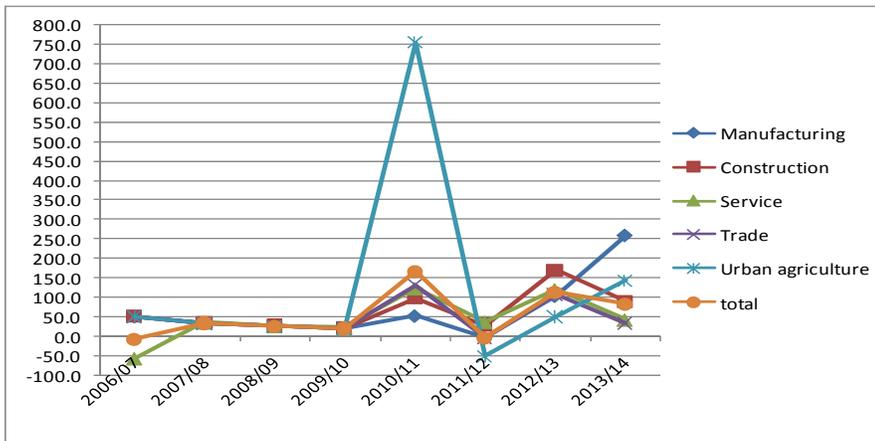


Source: Oromia Micro and Small Enterprise Development Agency (OMSEDA), 2014

ii) Employment

Although fluctuations have been observed, the overall employment in the sector has been growing from year to year. In the Oromia Regional State, about 396,517 jobs were created by SMEs in 2013/14. All the sub-sectors have contributed to the total employment generated by SMEs, the largest being the construction sector. This is similar to the data at country level where the construction sector happened to be the largest job creator. In terms of growth, high fluctuations have been witnessed in the urban agriculture sub-sector. Despite, the region’s potential for urban agriculture activities, it happened to be the least employment generator as witnessed at national level (Figure 7.4).

Figure 7.4: Employment in SMEs Operating in Oromia, growth in %



Source: Oromia Micro and Small Enterprise Development Agency (OMSEDA), 2014

III) Graduation to Medium Scale Enterprises

Owing to the various support extended by the regional government, a number of SMEs have been graduating into medium scale enterprises during the last few

years. The rate of graduation differs from one sector to another. The rate of graduation has been increased from 7.7 percent in 2009/10 to 25.9 percent in 2013/14. Of the sub-sectors which graduate SMEs into medium scale enterprises, construction is at the forefront by graduating 50 percent of the SMEs in the sector in 2009/10. The service sector graduated 38.2 percent of its total SMEs in 2011/12, and manufacturing 30.6 percent and 27.6 percent of its total SMEs in 2012/13 and 2013/14, respectively, thereby showing the high tendency of SMEs in the manufacturing sector to grow to the next level (see Table 7.6).

Table 7.6: Graduates from SMEs to Medium Scale Enterprises

Sector	2009/10			2011/12			2012/13			2013/14		
	Enterprises	Employment	Capital, in 000	Enterprises	Employment	Capital, in 000	Enterprises	Employment	Capital, in 000	Enterprises	Employment	Capital, in 000
Manufactory	7	48	3905.9	14	75	28808.4	79	241	124,579.0	218	915	345,081.0
Construction	13	107	19320.2	11	132	25287.9	44	266	80,141	165	1,439	279,701.1
Service	1	3	1200.0	26	412	28178.7	51	278	44,029	145	943	115,811.9
Agriculture	3	227	7091.0	10	121	11846.1	22	226	18,227	61	867	49,768.4
Trade	2	10	1279.5	7	265	6131.0	62	543	53,188	206	860	139,129.0
Total	26	502	32796.5	68	1005	100252.1	258	1553	320,164.2	795	5,024	929,491.4
Share, in %												
Manufactory	26.9	9.6	11.9	20.6	7.5	28.7	30.6	15.5	38.9	27.4	18.2	37.1
Construction	50.0	21.3	58.9	16.2	13.1	25.2	17.1	17.1	25.0	20.8	28.6	30.1
Service	3.8	0.6	3.7	38.2	41.0	28.1	19.8	17.9	13.8	18.2	18.8	12.5
Agriculture	11.5	45.2	21.6	14.7	12.0	11.8	8.5	14.6	5.7	7.7	17.3	5.4
Trade	7.7	2.0	3.9	10.3	26.4	6.1	24.0	35.0	16.6	25.9	17.1	15.0

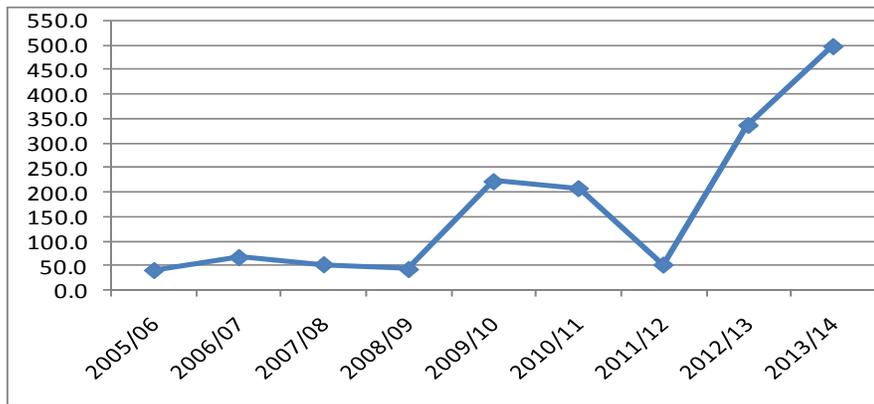
Source: Oromia Micro and Small Enterprise Development Agency (OMSEDA), 2014

IV) Credit

Financing plays a critical role for the development of SMEs. According to available data, the credit that has been extended to SMEs in the region has been increasing

during the last decade, except for the year 2011/12 during which a significant decline was registered. In general, the total credit from MFIs has increased from below Birr 50 million in 2005/06 to over Birr 500 million in 2013/14 indicating a ten fold increase over the period (Figure 7.5).

Figure 7.5: Credit to SMEs in Oromia Regional State in million Birr



Source: Oromia Micro and Small Enterprise Development Agency (OMSEDA), 2014

7.3. Performance at City Administration level: Addis Ababa

7.3.1. Number of SMEs and Employment Creation

Addis Ababa city administration had planned to establish 21, 497 SMEs in the city in 2012/13. However it has managed to establish only 6,285 SMEs depicting a 29.2 percent performance (see Table 7.8).

In 2011/12, the city administration generated employment for about 110.6 thousand people under the SMEs scheme. Of the total employment generated during the year, construction, manufacturing, and service sectors have constituted about 63.3 percent, 17.1 percent and 13.6 percent, respectively, the

three sectors accounting for about 94 percent of the total jobs created during the year (Table 7.7). The employment in the construction sector looks temporary and should be considered as an opportunity for raising the required initial capital to involve in other sustainability job creating sectors.

Table 7.7: Employment generated by SMEs in Addis Ababa

	2011/12	
	size in No	Share in %
Manufacturing	18,875	17.06
Textile and garment	5,338	28.28
Leather and leather products	1,992	10.55
Food processing	6,412	33.97
Metal and engineering/wood	4,367	23.14
Handicrafts	766	4.06
Agro-processing	-	
Construction	70,012	63.29
Contractor/building	29,419	42.02
Construction material producers	17,443	24.91
Cobble stone	23,150	33.07
Services	15,029	13.59
Municipality services	2,112	14.05
Electronics	629	4.19
Beauty salon	767	5.10
Maintenance	791	5.26
Other services/café/décor	10,730	71.40
Urban Agriculture	2,078	1.88
Vegetables	683	32.87
Animal feed production	297	14.29
Cattle breeding	1,098	52.84
Trade	4,625	4.18
whole seller of local produce	352	7.61
Retail trade in local produce	1,106	23.91
Raw material supply	3,167	68.48
Total	110,619	100

Source: Addis Ababa city administration, MSEDAs

7.3.2. Savings, Loans and Repayment

During 2012/13, Birr 480 million was planned to be mobilized in savings. However, Birr 633.2 million was mobilized depicting a 131 percent performance during the same year. In terms of loans, Birr 1,200 million was the target to extend to SMEs during the year and Birr 808.3 million was provided to SMEs in loans depicting a 67.4 percent performance. With respect to repayment, for the same year Birr 519.9 was planned to be recollected in loan repayment from SMEs and Birr 508.5 million was collected depicting a 97.8 percent performance (see Table 7.8).

7.3.3. Working Premises

Another critical factor which has been hampering the development of SMEs in the city was lack of working premises. Different types of working premises were planned and prepared during the year. In this regard, the completion of shades and workshops which had been rolling from past years was targeted at 38 but performance was 37 depicting a 97.4 percent during 2012/13. The planned construction of production and sales buildings was 17 but only 8 was constructed depicting a 47.1 percent performance. Another activity is identification and preparation of land for shades. In this regard, it was planned to prepare 500 thousand places but only 430 thousand was prepared depicting an 86 percent performance during the year. New 1547 shades were also planned for 2012/13, but only 242 shades were constructed depicting only a 15 percent performance. This is very low and it will roll to next year's performance (see Table 7.8).

7.3.4. Training

Of the constraints hampering the development of SMEs in the city, lack of the required skill has been identified as a key factor. To this end, three major types

of training were planned and provided to those participating in the sector. These include management, technical and business development service. For the year it was planned to provide management training for 45633, and it was provided to 49217 depicting above plan performance. It was planned to provide technical training to 17594 SMEs employees but was provided only to 81684 individuals depicting a 46.4 percent performance. Moreover, it was planned to provide business development service training for 5000 but performance 3664, depicting a 73.3 percent (see Table 7.8) achievement.

Table 7.8: Target and Performance of SMEs in Addis Ababa for the year 2012/13

S. No	Activities	2012/13
1	Number of SMEs	
	Target	21497
	Performance	6285
	Performance in %	29.24
2	Loans to SMEs, in '000 Birr	
	Target	1,200,000
	Performance	808,264
	Performance in %	67.36
3	Loan Repayment, in '000 birr	
	Target	519,913
	Performance	508,498
	Performance in %	97.80
4	Mobilization of savings, in '000	
	Target	480,000
	Performance	633,244
	Performance in %	131.93
5	Working premises	
5.1	Completion of last year's shades and workshops	
	Target	38

Table 7.8 cont'd...

	Performance	37
	Performance in %	97.37
5.2	Production and sales buildings	
	Target	17
	Performance	8
	Performance in %	47.06
5.3	Preparation of place	
	Target	500,000
	Performance	430,000
	Performance in %	86.00
5.4	New shades	
	Target	1,547
	Performance	242
	Performance in %	15.64
6	Training	
6.1	Management	
	Target	45,633
	Performance	49,217
	Performance in %	107.85
6.2	Technical training	
	Target	175,943
	Performance	81,684
	Performance in %	46.43
6.3	Business development service	
	Target	5,000
	Performance	3,664
	Performance in %	73.28

Source: Addis Ababa city administration, MSED A

Chapter VIII

Challenges and Prospects

8.1. Challenges²⁰

Most business enterprises in the country are classified under micro and small scale enterprises. The Government has been making tremendous efforts to enhance the capacity of SMEs in the last decade. However, the performance, in terms of share in the economy has fallen short of expectations. SMEs are faced with significant challenges which compromise their ability to function and to contribute optimally to the economy.

These constraints include the legal and regulatory environments; access to markets, finance, business information, business premises (at affordable rent), acquisition of skills and managerial expertise, access to appropriate technology, access to quality business infrastructure and, in some cases, discriminatory regulatory practices.

According to FMSEDA, the constraints /challenges/ facing SMEs are categorized as:

I) Finance

- Ineffective and inefficient service in providing loans and collecting repayments;
- Mismatch between credit demand and supply;

²⁰ This section draws heavily on a study conducted by MUDC,

- Poor mobilization of savings; and
- Failure to identify competent clients and capacity limitation to provide training, prepare business plans, and facilitate production and sales sites;

II) Production and sales cluster development

- Constructing production and sales cluster development without a master plan, absence of a plan map, uniformity in design, unfulfilled infrastructure, and mismatch in size between enterprises and buildings; and
- Absence of a legal system of managing and utilizing, duration and the fee for rent and failure to select the enterprises on production similarity and linkage criteria base.

III) Industrial extension service

- Failure in implementing the extension service; and
- Failure of TVET in developing capacity and implementing the extension service program.

IV) Human Resource Development

- lack of self reliance and innovative culture for job creation;
- lack of integration between SME development agencies and TVET and,
- failure to provide training on the basis of need/interest and lack of success in making it result oriented.

V) Technological development and growth

- failure of TVET to develop sensitizing on technology transfer and capacity/gap problem with experts in developing and disseminating technology,
- absence of readiness to accept and use new technology and readiness for change;

- weakness in working to supply suitable technology based on value chain; and
- absence of incentive schemes for TVET teachers and other professionals.

VI) Marketing Problems Faced by SMEs²¹

The marketing constraints include lack of product diversification, problems related to price, competition, information, and marketing space.

a) Product

SME operates in a relatively similar manner. They produce similar products lacking diversity; as a result similar products over-crowd the market. Some micro enterprises shift from one product to another, and in doing so, capture better market opportunities. Nevertheless, as soon as the market has established itself, a multitude of further micro enterprises start to engage in the same business and this causes the selling price to fall immediately.

Furthermore, certain SMEs lack the skill to modify their products, such as handicraft products, pottery, furniture, metal products, kitchenware etc. There is also lack of a sufficient range of product designs. Most products that are made available by SMEs can also be obtained from medium-sized enterprises that mostly have market advantages due to their scale.

b) Price

Some SMEs sell at break-even or even below cost mainly due to:

- lack of basic costing knowledge;
- overlooking overhead costs as expenses;
- failure to consider family labor as costs of production;

²¹ based on the study by

- lack of book keeping skills; and
- lack of knowledge regarding raw material-output ratio.

In some instances SMEs are forced to sell at any lower price, however low due to the existence of larger enterprises, which sell similar products with reduced prices.

c) Competition

There is competition between SMEs and medium and large scale industries as well as within similar goods producing and selling SMEs. The latter is what concerns SMEs the most.

d) Lack of Market Related Information

Market and related information is vital to overcome the marketing problems of the sector. These problems are manifested by:

- lack of information to locate the best market;
- inability to analyse the respective markets;
- lack of skills to set competitive prices; and
- inability to effectively promote products.

In most cases, market studies are not carried out before a venture is established.

Even though some organizations help SMEs build their marketing capacity, there is resistance on the part of many SMEs, mainly due to low awareness. On top of that, the experience of SMEs is confined only to local conditions and they are not well aware of what is going on in the rest of the world. In many cases people responsible for selling SMEs' products are family members lacking general knowledge of marketing. Furthermore, business and family affairs are intertwined.

e) Retailing

Most SMEs do not have the necessary retail outlets. In this case they are obliged to sell products on market days only. However, accessing premises in good locations may not be easy for SMEs. There may be the problem of infrastructure as well as high rent for the premises.

According to CSA (2003), in Ethiopia, the major obstacles experienced by small scale manufacturing industries are irregular and erratic supply of raw materials and a shortage of suitable working premises. Lack of working premises was also found to present difficulties for the informal sector operators which faced with insufficient capital, was often impeded from the start. The problems of raw material shortages, lack of working capital and effective marketing practices faced by small manufacturing industries have become obstacles for the expansion of the sector.

8.2. Prospects

The study on micro and small enterprises has revealed that there has been a phenomenal growth in the number of SMEs and the employment generated in the last few years. Moreover, there has been a growing tendency to be self employed by many young graduates instead of waiting for employment from public or private sector.

The increasing demand for consumer products produced by SMEs thereby creating a large market for SMES and this added to improving the business environment and government commitment to promoting and supporting the sector provide bright future prospects for small and medium enterprise.

SMEs have been getting utmost attention from the government due to their indispensable role in curving some of the critical problems the economy has been

suffering from since recently. This attention and the continued supports for the development of the sector would make the prospects of the SMEs brighter for growth. These prospects can be manifested by:

- increasing trends in the graduation of SMEs into medium scale enterprises and the high share of manufacturing SMEs would further strengthen the various linkages in the economy;
- increasing supply of working and selling premises is another factor which boosts the sector's prospects for growth as it would help SMEs station themselves in permanent market location;
- learning from the weaknesses of existing Incentives and support , further improving of the support boosts the prospects for growth as enterprises require higher support on a larger scale; and
- the presence of a large domestic market, especially for the large low income segment of the population, would serve as an incentive for further expansion of production by SMEs.

Chapter IX

Summary and Policy Recommendations

9.1. Summary

Development of SMEs is among the strategic directions pursued during the GTP implementation period. Accordingly, the focus has been on promoting the development and competitiveness of SMEs. Businesses and public development programs have been used to promote the development of SMEs and to promote employment opportunities. Thus, SMEs development was integrated in the construction of new public universities, the development of sugar industry, integrated housing development, road construction and railway networking and construction, power generation, as well as cobblestone development during the last three years of the GTP period.

The small scale and cottage industries sector has grown by 4.8 percent during the last three GTP implementation years which is lower than the preceding plan period despite heavy promotion activities. Moreover, manufacturing SMEs have been growing by a rate slower than the growth by medium and large scale manufacturing industries over the last decade.

The share of manufacturing SMEs in the total GDP declined from about 1.6 percent in 2004/05 to 1.3 percent in 2012/13. Despite the significance of their number in the country, their share in the GDP is lower than the share of the few medium and large scale manufacturing industries throughout the period.

According to the Federal Micro and Small Enterprise Development Agency (FMESDA), a total of 70,455.00 new SMEs were established in 2011/12 employing 806,322.00 people across the country²². Compared with the target set in GTP, the registered performance is low.

According to FMSEDA, the jobs created by SMEs have been growing since 2010/11. The total number of employment in 2010/11, 2011/12, 2012/13 and the first 9 months of 2013/14 were 289 thousand, 806.3 thousand, 1223.7 thousand and 963.8 thousand, respectively.

According to the data, the biggest employment has been generated by the construction sector, accounting on the average for about 36.2 percent over the four GTP implementation years; followed by services with 20.8 percent, trade accounting for 15.2 percent, manufacturing for 14.7 percent and urban agriculture 13.1 percent over the four GTP implementation years.

According to FMSEDA, about 292 buildings were constructed during the last four years and more are under construction. In addition to building construction, the number of shades has increased from year to year over the same period.

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²² Data obtained from FMSEDA,

The number of MFIs increased from 11 in 1998/99 to 31 in 2010/11 depicting slower growth in the face of the mushrooming of SMEs in the country. Some of the MFIs have grown to big banks thereby mobilizing huge resources and extending larger loans to the bulk of SMEs.

9.2. Policy Recommendations

The problem faced while undertaking this study was lack of detailed data on the performance of SMEs. Therefore, the federal MSEDAs should have detailed time series data on the sector.

Cortright (2006) states that industrial clusters have long attracted the attention of researchers and policymakers. He further emphasized that clusters help small firms overcome constraints associated with size, promote technological development, and enhance their ability to compete in local and global markets (Cortright, 2006). In addition, a cluster approach provides both soft (such as building trust) and hard elements (physical infrastructure, common facility centers) to SMEs. Therefore industrial cluster development has to be further promoted.

More emphasis should continue to be given to enhance the productivity and competitiveness of SMEs and transform the successful enterprises to medium and large scale industries. In this regard the quality of the industrial extension services should be improved to transform the technical and entrepreneurship capacity of the business operators and also the productivity and competitiveness of the businesses.

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Annex I

Sub-sectors	SDPRP end year	PASDEP Period					GTP period			
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	PASDEP period average	2010/11	2011/12	First two-year average
Food & Beverages	29.04	30.10	28.65	31.67	30.54	32.48	30.69	38.68	27.55	33.11
Tobacco	0.64	0.64	0.64	0.96	0.76	0.53	0.71	0.77	0.74	0.75
Textile	18.97	18.65	17.42	8.14	11.19	11.55	13.39	7.75	16.37	12.06
Wearing Apparel	2.39	3.46	6.10	5.84	5.29	5.05	5.15	3.35	6.23	4.79
Leather	7.25	6.68	6.70	6.59	5.94	5.78	6.34	8.08	7.79	7.94
Wood	1.43	1.48	1.61	2.43	1.43	1.76	1.74	2.30	1.82	2.06

Paper & Printing	6.88	6.80	6.55	6.84	5.99	5.40	6.32	5.81	4.58	5.20
Chemicals	5.47	4.78	5.64	5.96	5.46	6.04	5.58	5.62	5.99	5.81
Rubber & Plastic	5.20	5.82	6.12	6.70	8.12	7.49	6.85	6.33	7.06	6.70
Non-Metallic Mineral	8.29	8.52	8.94	12.93	13.44	10.53	10.87	9.94	11.38	10.66
Basic Iron & Steel	1.61	1.79	1.54	1.02	1.16	2.17	1.54	2.84	1.53	2.19
Fabricated metals, Except Machinery & Equipment	3.51	4.89	2.82	3.98	4.00	5.39	4.22	3.48	4.16	3.82
Machinery & Equipment	0.20	0.34	0.14	0.14	0.12	0.46	0.24	0.37	0.02	0.20
Motor Vehicles	1.13	1.23	2.51	1.32	1.14	0.90	1.42	0.94	0.92	0.93
Furniture, NEC	8.00	4.80	4.59	5.47	5.40	4.46	4.94	3.73	3.85	3.79