



Informal and Formal Businesses Operated by Women in Jigjiga City: Characteristics, Informal-formal Sector Linkage, Challenges and Way forwards

Habtamu Girma^{a,*}

^aDepartment of Economics, Jigjiga University, Jigjiga, Ethiopia

ABSTRACT

This study is aimed at making inferences on the general picture of businesses in the Somali Region, with a focus on women operated business units both in the formal and informal sectors of the economy. The sample of the study involves two categories of respondents: women in the formal sector and Business women in the informal sector. The study heavily relied on primary data sources as source of information. Quantitative and qualitative data were gathered through structured questionnaires and focus group discussions (FGDs). Field observation was also taken as an important source of information. The study employs a mix of quantitative and qualitative techniques of inferences. The quantitative analysis involves descriptive and econometrics tools. The study found out that lack of alternative employment opportunities and low income in the formal employment as major reasons driving women into the informal businesses. Cumbersome business registration requirements and tax administrations in formal sector arrangement are also another reason that was found to be discouraging formal sector engagements which rather incentive to work underground. Moreover, the study concluded that migrant laborers are major players in the informal businesses in Jigjiga City. More importantly, the study found out that informal businesses complement businesses in formal businesses. The linkages between the informal and formal sector were identified as source of raw materials, labor, information and capital. The study further concluded that social capital is an important component of the economic environment, having facilitating role in business activities both in the formal and informal settings. The findings of the study suggests for legal and institutional reforms which facilitate the way informal and formal businesses can function together. Informal sector development interventions should also align migration and urban development issues as central parts of their undertakings. As the study concluded social capital for having vital role in the business undertakings, policy regimes aimed at business development have to capitalize on the stock of social capital.

Keywords: Informal-Formal business Women, Jigjiga, Ethiopia

1. Introduction

One of the distinguishing features of the economy of Somali Region is that business environment is featured by the inter-linkage of formal and informal sectors. Another feature of the economic fabrics of the region is that women are key drivers of the economy. In most urban communities in Somali region, women actively engage in economic activities, where they contribute considerably to household income. The role of women in supporting the family economically is in addition to their multiple in-house roles,

ranging from caring children to whole aspect of family management (Demiessie, 2019).

A particular role of women in the economy is that their participation in the urban informal sector. For example, in March 2012, women in the informal sector constituted 68.5% of the labor force in the urban areas, where the share of men in the same sector was only 42.2%. In April 2014, the percentage of women aged 16 and above involved in the informal sector accounted 57.2% (as compared to 32.7% figure that goes to men) of the total work force in the urban areas in Somali Region. As of June 2018, it was reported that Proportion of persons in the urban area who Work in the Informal Sector accounts 27.8% of the total labor force in the region, where the share of women in the informal businesses was 77.7%(CSA, 2018).

As a reflection of the regional context, businesses in Jigjiga city is dominated by women, where one observes engagements of businesswomen both in the formal and informal sectors.

In essence, studying formal and informal sector business helps understand the nature, dynamics and linkages of business among the two sectors in general. Moreover, such a study enables to identify particular (unique) and shared

* Corresponding author: Habtamu Girma: ruhe215@gmail.com

Article Information:

Received: 15 September 2020

Revised: 21 November 2020

Accepted: 18 December 2020

Available Online: 30 December 2020

How to Cite this Article:

Girma H (2020): Informal and Formal Businesses Operated by Women in Jigjiga City: Characteristics, Informal-formal Sector Linkage, Challenges and Way forwards. East African Journal of Pastoralism, 1(2):6-12 2020.

© 2020 The Authors. Published by Jigjiga University. This is an open access article under the CC BY license(<http://creativecommons.org/licenses/by/4.0/>)

factors that affect the businesses in the economy Abdelzaher (2019).

As such, studying the businesses operated by women in both formal and informal sectors in Jigjiga city is telling about the nature, structure and dynamics of the economy of the Somali Regional state of Ethiopia. It is on the background of the above issues that the essence of this study is justified.

Therefore, the study is aimed at making inferences on the general picture of businesses in the Somali Region, with a focus on women operated business units both in the formal and informal sectors of the economy. More specifically, the study addresses on the followings:

- Assess the essential socio-demographic characteristics of businesswomen involved in the formal and informal business ventures
- Identify the reasons (factors) that motivated businesswomen to participate in their ventures
- Examine the types, extent and determinants of linkages between formal and informal businesses
- Identify the major challenges faced by women business operatives in the formal and informal sectors

2. Material and Methods

2.1. Data and Sampling

The study heavily relied on primary data sources as source of information and inference. Therefore, quantitative and qualitative data were gathered through structured questionnaires and focus group discussions (FGDs). Field observation also takes an important source of information.

The sample of the study involves two categories of respondents: women in the formal sector and Business women in the informal sector. The sample size is determined on the basis of subjective sample selection criterion pertaining to the goal of the study. Given the nature of the study, the sample size of 100-120 is an optimal sample size.

Hence, the study sampled 109 business units owned/run by women in Jigjiga City. The sample was drawn from both groups of businesswomen involved in the formal and informal sectors. A proportional sample was taken from the two sectors, where 50 businesses units were selected from formal sector and 59 from the informal sector.

2.2. Techniques of Data Analysis and Inference

The study employs a mix of quantitative and qualitative techniques of inferences. The quantitative analysis involves descriptive and econometrics tools. A descriptive technique was meant to infer on the socio-economic status of business in the formal and informal sectors. Moreover, the descriptive analysis depict on the essential drivers to informal sector to women.

2.2.1. Logistics Model Specification

The logistics regression is used to investigate determinant factors of linkages between formal and informal businesses.

- Endogenous variable

The endogenous variable is probability of linkage between formal and informal businesses. **Linkage (LNKGE)** is a binary dummy variable.

LNKGE =0 there is no linkage of formal business units with informal businesses or vice versa

LNKGE =1 there is linkage of formal business units with informal businesses or vice versa

- Explanatory Variables

From theoretical and empirical literature, linkage between formal and informal sectors is determined by a number of variables. These are: Registration of the Business (**REGIST**), Start-up Capital (**STARTCAP**), income of the entrepreneur (**INCOME**), access to credit facility (**CREDIT**), Operation on Full Time Basis (**FTIME**), number of workers (**WORKERS**), Access to training (**TRAIN**), future expansion plan (**EXPAND**), Rental status of the premise of operation (**RENT**).

Hence, the Logistic Model to be specified assumes the following:

$$LNKG = REGIST + STARTCA + INCOME + CREDIT + FTIME + WORKERS + TRAIN + EXPAND + RENT$$

2.2.2. Reliability and Robustness Test on the Estimation from the Logistics Regression

To check the reliability and robustness of the data and model, the regression model will use appropriate statistical tests and procedures that logistics regression model requires. The overall fit of the logistic regression model is tested by 'Omnibus test of the model coefficient' and the 'Likelihood ratio test'. The significance of the individual predictors is given by the score test or the Lagrange multiplier test. The significance of the individual parameters is also tested by constructing correlation coefficient matrix which confirms the results of the score test.

3. Results and Discussion

3.1. Socio-demographic Characteristics of Women in the Informal and Formal Sectors

In this study, the socioeconomic background of respondents was investigated. The findings shows that the majority of women in the informal sector were economic migrants arrived to Jigjiga from other parts of Ethiopia, accounting 71.19% of sample respondents.

With regards to the age structure, the majority of respondents were in the age bracket from 20-50 years, with respective share in this age bracket in the formal and informal sectors accounted 94% and 84% respectively. In both cases, the sample data shows that the majority of business women are in child bearing ages. That signals business women have dual responsibility of performing house work and in income generating businesses to their families.

Moreover the age structure of sample respondents reveal that while the informal sector is dominated by youth women, the formal sector is dominated by adult age groups. In this regard, 56% of respondents in the informal employment were

Table 1
Definition of Variables

Variable	Definition/Measurement of Variable	Hypothesis
Linkage (LNKGE)	is a dummy dependent variable. The dependent variable (i) pertains to the probability that a formal/informal sector enterprise has backward and forward linkages with the informal/formal sector. The existence of business linkage takes a value "1" and its absence is coded	
Registration of the Business (REGIST)	Registration provides legal prohibition for the business units which will restricts linkages with the informal units. The Business units which are registered are coded as "1" and absence of registration is coded as "0".	Registration, thus, is assumed to affect the forward and backward linkage between formal and informal businesses negatively.
access to credit facility (CREDIT)	Availability of credit from formal financial institutions, like banks and/or micro-finance institutions. The variable is a binary variable with its presence coded as "1" and its absence coded as "0"	Formal sector units having access to formal finance sources limits their linkage with the informal sector as source of finance or business transactions.
Start-up Capital (STARTCAP)	startup capital is the amount of Initial investment It is a continuous variable and takes the amount reported by respondents	The higher the initial Investment level of businesses the less likely to have linkage with informal sector
income of the entrepreneur (INCOME)	Income refers to income of women entrepreneurs in the formal sector generated in a certain period interval. In this study, Income is a continuous variable assuming the value reported by women in the formal business per month	The higher the income in the business, the less likely it has a linkage with informal sector.
number of workers (WORKERS)	It is a number of workers employed by the formal sector business unit. The value is depicted as reported by women in the formal business	Number of workers affects the plausible interaction between the formal and the informal sector. For instance, the formal business units with large number of workers are assumed have less linked with the informal sector as they are better organized than the units with smaller number of workers
Access to training (TRAIN)	This variable denotes access to training on businesses. In this study, training is defined as access to capacity building training by women in the formal business units. Hence, businesses run by the trained women entrepreneurs are coded as "1" and those run by entrepreneurs without training were coded as "0".	Access to training services to business women enhances the profitability and sustainability in their engagements. More importantly, access to capacity building services incentives to operate their businesses in formal businesses as a registered venture. As such, business women having access to training services are less likely linked with informal businesses.
Future expansion plan (EXPAND)	This variable represents the anticipated growth of the enterprise. This is measured by the intention for future expansion and their attitude towards profit Those business units which intend to expand in near future were coded as "1", and "0" otherwise.	Those business units which feel that their profit is increasing in recent times are less likely to procure raw materials/ intermediate goods from the informal sector to speed up the production (as informal sector is unable to supply in large scale). Similarly those units which intend to expand in near future are assumed to have negative impact on their linkage with the informal sector.
Operation on Full Time Basis (FTIME)	This variable represents whether the business unit operate in full time or part time basis, as reported by women in the formal businesses. Those units who report full time operations of their respective business were coded as "1", and "0" otherwise.	The enterprises which operate on a full time basis are less likely to establish both backward and forward linkages with the informal sector.
Rental status of the premise of operation (RENT).	Is a business women report on the rental status of their premises as rented or owned. Those who report as owned assumes a value of 1 and those who report they their working premises are on rental basis were denoted as 0.	Having permanent location, as measured by the variable rented premise, helps a formal unit to not to establish linkage with the informal sector, because such an act would erodes the businesses' reputability by other formal businesses in its neighborhood. , it also exposes itself to be tracked by regulatory bodies

aged below 30 years. The figure was 30% for women in the formal sector employment.

The demographic analysis results show that informal sector employment has important links with migration and youth unemployment issues. This finding is in consistent to findings on factors driving to informal sector, where a majority of respondents reported that lack of alternative employment as main reason why they involved in the informal sector.

3.2. Factors Driving to Participate in Informal and Formal Businesses

With regards to causes of participation into the informal businesses, the study found out that lack of alternative employment opportunities a major push factor, with a response rate in this regard was 53.85%. The second major driver was low income in the formal employment, where 28.2% of women reported in this regard. School drop-out is identified the third major factor that drive women to informal sector economy, with 7.6% of respondents in this regard. Demographic factors like divorce and death of husbands/parents were also reported driving women to look informal sector as source of livelihood. Moreover, a majority of women in the informal sector were economic migrants destined to Jigjiga from other parts of Ethiopia, accounting 71.19% of sample respondents.

The study also considered reasons to start business by women engaged in the formal businesses. In this regard, women entrepreneurs responded that their engagement was driven mainly as an alternative source of income (56%) and as source of livelihood (28%). Business start-up inherited from family engagements and as source of employment were also raised by 16% of respondents (8% each) as reasons to involve in business ventures.

3.3. Types, extent and Determinants of Linkages between Informal and Formal Sectors

The study also investigated the types, extent and determinants of linkages between the informal and formal sectors. In this regard, five types of linkages identified: as source of raw materials, cliental linkage, sourcing labor, as source of information and as source of capital. The study findings reveal that informal sector the major source of inputs for formal sector participants as a source of raw materials and as a source of labor.

The extent of linkage is found to be very high. In this regard, 74.4% of businesses in the formal sector reported to have linkage with informal sector at least in one or more of the aforementioned five aspects of linkages. To understand on the determinants of linkage between formal and informal business units, the study employed logistics regression model. The finding in this regard shows that initial investment capital (start-up capital), access to credit and rental status business were significant factors in relation to linkages.

The logistics regression result shows that the start-up capital and linkage are negatively related, implying that

the higher the initial investment by businesswomen in the formal sector the less likely to have linkage with the informal sector. On average, businesses with higher start-up capital are 0.0000703 times less likely to form linkage with the informal sector. This finding complies with the findings from the descriptive analysis, where negative correlation between linkage and start-up capital identified. Business women's access to capacity building trainings was another variable having negative association with linkage. The coefficient of this variable was estimated as -0.51894, indicating women in the formal sector with access to capacity building training were less likely to have linkage with the informal sector, on average, by probability factor of 0.51894. This findings complies theoretical and empirical justifications. Moreover, the findings confirm the result from correlation analysis made under the descriptive part of the study, where access to training by business women is negatively associated to linkage with informal sector.

The rental status of premises of business units is another significant variable with positive association with linkages. According to regression result, business units rented are more likely to link with the informal sector than businesses operated in buildings/homes/warehouses owned by businesswomen. In this regard, the probability of linkage with informal sector of businesses whose premises are rented as against to those operate using premises of their own is higher by a probability factor of 2.2, on average. This is incompatible with the hypothesis laid by the study. One assertion why business units which use their own buildings less likely link with informal businesses is that the cost of linkage is dear if they do so. Having own businesses premises and working with the informal businesses risks the probability of getting tracked by the regulatory body of the government or custom inspections.

The regression result also revealed on the importance of informal sector as source of labor for formal business units. The coefficient of this variable was 0.2532, signaling there is a positive association between the number of workers and linkage. Accordingly, those formal business units having one more labor are more likely to have linkage with the informal sector by a factor of 0.2532, on average. This finding is confirmed by findings from descriptive analysis of the study, where the correlation analysis depicted a positive association between number of workers by a business units and its linkage to informal sector. Moreover, the finding is in compatible with another finding from descriptive analysis where 80.8% of formal business units reported the informal sector as their major source of labor.

The regression analysis further shows that formal business units having access to credit are more likely to link with informal sector. This finding is against the hypothesis laid by the study. One assertions given by empirical studies why access to credit limits linkage with informal businesses is that the lending institutions (banks) request businesses to come up with business transactions made in invoices. In the context of business women in Jigjiga, such financial information are not a precondition to get credit given the

major sources of credit reported by respondents were micro-finance institutions. And the researcher has learnt that micro-finances do not consider customers' financial information mandatory to provide credits. Perhaps, this is a likely reason why access to finance and linkage are not correlated in a way suggested by empirical findings.

Another variable in the regression having positive association with linkage was the scale of business operation (in this study represented part time operation against full time operation), where the coefficient of this variable is estimated as 1.81. Accordingly, businesses in the formal sector working on part time basis are more likely to have linkage with the informal sector, with a probability factor of 1.81 that formal businesses working on a full time basis. The finding in this regard is consistent with theoretical assertions and evidences from empirical findings of similar studies. The correlation analysis of this study, as depicted under the descriptive part of discussions, also confirms the probability of positive association between formal businesses operating not on full time basis and linkage with informal sector.

The income level of business units and the current working capital were positively associated, with the value of respective coefficients estimated 0.1622 and 0.1857. The findings were against the hypothesis laid in the study. However, the field observation of the researcher and FGD results from discussants suggest so despite the hypothesis laid by the study pertaining previous empirical evidences. Moreover, this finding confirms results of correlation analysis made in the descriptive part of the study. One justification that can be made for the positive association of those variables with informal sector linkage is contextual factors surrounding the business environment in the Jigjiga City. As a matter of fact, business in the city of Jigjiga is dominated by informal sector, and without any linkage of the formal business units with the informal sector, their performances would be at stake. That is a likely condition that business units in the formal sector with higher income and current capital are those who are linked with informal sector.

3.4. Major Challenges Faced by Informal and formal Business Participants

The study also explored on existing challenges faced by business women engaged in informal and formal activities.

3.4.1. Challenges Faced by Informal Business Participants

The main problems raised were working place problems, lack of access to credit to expand their businesses; business recognition and work security challenges. In this regard, the study found out that 31.4% respondents reported to have faced the problem of housing/working place. About 24.8% women had the difficulty to access capital. Another challenge raised by respondents was the view of government bodies on their undertakings as biased. Despite the importance of informal businesses in absorbing large size of unemployed labor forces and a source of income for considerable size of families, informal sector operators let alone

receiving various supports from government bodies, are considered illegal. The respondents emphasized the notion that informality does not mean illegality. Respondents stated that whatever supports and assistances comes to business community goes to formal sector operators.

The researcher of this study tried to communicate relevant government bodies in Jigjiga City to address the issue. According to government officials, informal sector activities in the city have been increasing time after time. The bulk of informal sector engagements involves in activities like petty trading, street vending, home based food and beverage sales, etc.

Government officials acknowledge, though in words, on the role of informal businesses vital as source of employment for an increasing labor forces in Jigjiga city and in mitigating the burdens of increasing level of urban poverty, in action however, there seems confusion on the issue at hand. The government officials subjected for this study raised the need to endow support for informal sector participants, but the legal issues and perceived look into the informal sector as illegal is a major barrier for any possible capacity building interventions.

For instance, one official said this:- "Even if informal activities have so many valuable roles, interventions to enhance their businesses means promoting informality and illegal activities by discouraging formal sector operators. Such a case would even incentive participation in informal sector where formal sector operators inevitably transform into informality".

3.4.2. Challenges Faced by Formal Business Participants

Women entrepreneurs in the formal businesses were asked for any problems they are encountering in their venture. The major challenges raised were structured in the questionnaire into five main dimensions to rank in order of importance: financial, Social, self-sufficiency, economic and social justice related problems.

The finding of the study reveals that the three most raised problems in order of importance were: social, self-sufficiency and financial. A majority (79.5%) of business-women reported the major challenge in their ventures was social problems. Amongst the list of mentioned social problems, traditional norms and values was by far the major hindrance for their successful business undertakings.

The second major challenge was attributed to self-sufficiency issue, where 75% of respondents agree or strongly agree for the problem to prevail. In this regard, heavy workload aspect of self-sufficiency problem was mentioned for being core challenge in their business moves. This is attributed to over burden in time and energy women entrepreneurs has to lend to family care and management, in addition to their business activities.

The least mentioned problem was financial challenges. This, in part, is explained by the unique fabric of the communities of interest of this study, where the stock of social capital is immense where business people have good

record/tradition of sharing resources (including financial). For instance, as reported by business women, social capital (transfers/loan/gift from families and relatives) consist major source of finance as a start-up and/or investment capital for their businesses.

4. Conclusion and Recommendations

The study examined the characteristics, linkages and challenges of formal & informal businesses operated by women in the city of Jigjiga, Somali Regional State of Ethiopia. Inferences from the data & information employed by the study connote key evidences whose importance is not just for the service of policy interventions but also evoking the academic & research circle for further study on the topic at hand.

A comparative analysis of women in the informal and formal business entails that there is a difference in the reasons of participations in their undertakings. For formal business operators, their activity is motivated not as primarily source of employment & income, rather as an alternative employment and income. However, the opposite is true for women participating in the informal sector. A majority of sample respondents from informal business operators group reported that their business gives them of means for their livelihood, as primary source of employment & income. This suggests that while women in the formal businesses do have other sources of employment opportunities & income sources to lean on, the livelihood of women in the informal sector is largely dependent on their ventures.

The finding in this regard caters to the conclusions made by other studies on the topic at hand. For instance, the importance of informal sector as sole source of employment & income for women in Ethiopia in general, and for women belonging to urban communities in Somali Region in particular, is reported in the 2018 National Urban Employment-Unemployment Survey document which was undertaken by Central Statistics Agency (CSA) of Ethiopia.

Despite the significant role of informal sector in reducing unemployment, mitigate income poverty and enhance women's empowerment economically, it is considered by local government as **illegal**. Inferences made from qualitative survey made in this study reveals that businesswomen in the informal sector do not get support and recognition from government and policy makers as they are considered illegal. This is despite the fact that the multitude of contributions of the sector economy and. In fact, **informality does not mean illegality**. And, local government/policy regime has to devise inclusive policy arrangements where benefits that go to formal businesses can also be privileged by informal business operatives at least.

The study found out that business people look for informal activities not to evade tax or business registration. In fact, this contradicts the common wisdom on the matter at hand. Inferences made by the study shows cumbersome business registration requirements and tax administrations in formal sector arrangement discouraging and rather incentive to work underground. Similar conclusion was also made

by related other studies see (Demiessie and Regasa, 2016). Therefore, the concerned body of local administration is expected to undertake reforms that tackle problems associated with business registration and taxation. In this regard, policy regimes have to focus on legal, institutional and bureaucratic incentives which would encourage participations in the formal business.

Furthermore, the study found out that informal businesses are by themselves complement businesses in formal businesses. The study reveals that informal sector is linked to formal businesses as sources of raw materials, sources of information, source of labor. The linkage between informal and formal sectors goes also as client, where formal/informal businesses were found to be final consumers of each other's products. Therefore, the policy regimes have to acknowledge that considering formal and informal businesses as interdependent. The policy implication in this regard is clear: it takes to create legal and institutional reforms which facilitate the way informal and formal businesses can function together. To that end, policy regimes can be considered instrumental to:

- Tap institutional resources between the formal and informal economies to fill institutional gaps.
- Reduce transaction costs of service and public goods provision in developing countries
- Integrate business into poverty alleviation by building ties with informal markets and institutions

The study also concluded that migrant labor consist major players in the informal businesses. Migrants arrived in Jigjiga city to cross borders en route to middle-eastern Arab countries. More often than not, in any case their plans to cross borders may not hold, migrant prefer to stay in Jigjiga city and neighboring towns engaged/employed in informal businesses. This has an important policy implication connoting informal sector development an important variable which should be placed integral part of interventions in the realm of migration and urban development. The conclusion made in this regard aligns with inferences made by other researches see (Demiessie and Regasa, 2016).

Last but not least, the study found out that social capital an important component of the economic environment, having facilitating role in business activities both in the formal and informal settings. The importance of social capital to business people goes as sources of information and start-up and/or investment capital. Social capital is also instrumental in reducing transaction costs in business transactions in general and in contract administration in particular. Trust is an important social commodity that business people use as collateral in exchanging resources like cash and property transfers. The important role of social capital for business undertakings in general and the case in Somali Region in particular is mentioned in related other studies See (Schreiner, 2000; Lee and Persson, 2016; Demiessie, 2019).

Therefore, policy regimes have to capitalize on the stock of social capital in any interventions aimed at business development endeavors.

Acknowledgments

I would like to express my deepest gratitude to Somali Regional State Chamber of Commerce and Sectoral Association and Center for International Private Enterprise (CIPE) - East Africa Regional Office who motivated the undertakings of this study. Moreover, these two organizations facilitated for a seminar session where I presented the preliminary results of the research and fetched comments and suggestions which were very important to upgrade the study. I also extend my sincere regards to Oumer Nuru (PhD) whose assistances were crucial not only in the process of the research undertaking but also in the publication process of the work too.

Conflict of Interest

The author declare that he has no competing interests with any party, an individual or organization

References

- Abdelzaher, M. A. (2019). A comparative study between informal and formal finance: A.
- CSA (2018). Key findings on the 2018 urban employment unemployment survey: Comparative analysis to 2012 and 2014-2016 survey results, addis ababa, ethiopia.
- Demiessie, H. (2019). Involuntary simplicity, individualism and wellbeing (inference from eastern ethiopia communities).
- Demiessie, H. and Regasa, W. (2016). An inquiry into the nature, causes and effects of contraband: Case of ethio somaliland border corridor. *International Affairs and Global Strategy, ISSN*.
- Lee, S. and Persson, P. (2016). Financing from family and friends. *The Review of Financial Studies*, 29(9):2341–2386.
- Schreiner, M. (2000). Informal finance and the design of microfinance (vol. 11, pp. 637-640). *United States: George Warren Brown School of Social Work, Washington University*.