DETERMINANTS OF WOMEN LABOR FORCE PARTICIPATION IN TRANSPORT SERVICES: IN CASE STUDY OF SNNPR OF ETHIOPIA

MSc THESIS

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DETERMINANTS OF WOMEN LABOR FORCE PARTICIPATION IN TRANSPORT SERVICES IN ETHIOPIA: CASE STUDY IN GURAGHE ZONE

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A THESIS SUBMITTED TO THE DEPARTMENT OF ECONOMICS, COLLEGE OF BUSINESS AND ECONOMICS, SCHOOL OF POST GRADUATE STUDIES, WOLKITE UNIVERSITY, WOLKITE, ETHIOPIA
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STUDENT'S DECLARATION

I undersigned here, declare that this work entitled **"***Determinants Of Women Labor Force Participation in Transport Services in Ethiopia: Case Study in Guraghe Zone***"** is my own original work and has not been submitted to/presented for award of any other degree or diploma to any university or other institute of higher education. And all the materials used as reference in this case this study have been duly acknowledged.

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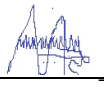
Signature 

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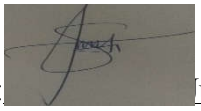
This is to certify that the thesis entitled "Determinants Of Women Labor Force Participation in Transport Services in Ethiopia: Case Study in Guraghe Zone **"** submitted in partial fulfillment of the requirements for the degree of **Master's** with specialization in **Development Economics** the Graduate Program of the **Department Economics,** and has been carried out by ABDLAIZEZ SHUME**(**Id. No GSR/094/11), under our supervision. Therefore, we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the department.

Tesfaye Etensa (Ass. Prof.):  June 22, 2020

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As members of the Board of Examiners of the final Master's degree open defense, we certify that we have read and evaluated the thesis prepared by Abdlaizez Shume under the title "Determinants Of Women Labor Force Participation in Transport Services in Ethiopia: Case Study in Guraghe Zone**"**and recommend that it be accepted as fulfilling the thesis requirement for the degree of **Master of _Science in Economics** with **Specialization in _Development Economics.**

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Final approval and acceptance of the thesis is contingent upon the submission of the final copy of the thesis to the SGS through the DGC/SGC of the candidate's department/School.

Thesis approved by

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May ALLAH always Alhamdulillah.

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Acronyms and abbreviation

ADB	Asian Development Bank
AWOTS	Awareness creation training on transport services
BRT	Bus Rapid Transit
BVG	Berliner Verkehrsbetriebe
CEDAW	Continues Employment Discrimination Against Women
CER	Company Employment Reduction
CSA	Central Spastics Agency
EDUC	Education Level of the employments
EIGE	European Institute of Gender Equality
EIM	Economic Institutional Measurement
ETF	European Transportation Forum
EU	European Union
EWCS	European Working Conditions Survey
FLFP	Female Decision to participate
GSP	Gender-specific policies
GZAD	Guraghe Zone Agricultural Department
GZFEDD	Guraghe Zone Finance and Economy Development Department
ICPD	International Conference on Population and Development
ILO	International Labor Organization
KLM	Knowledge about labor market
LPW	Labor protection and welfare
LAOC	Lack of access to other careers
MRS	Marital status of the employments
OECD	Organization for Economic Co-operation and Development
RATB	Reginal Autonomus de Transport Beurcuratic
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
UNDP	United Nation Development Program
WEF	World Economic Forum
WIR	Women Institutional Research
WISE	Women'sInternational SectorEmployment

Abstract

This study aimed at analyzing determinants of women's decision to participate in transport services in Ethiopia by taking Guraghe zone as a case study. The study used both primary and secondary sources of data. The primary data was collected from 309 women by using multi-stage sampling method. Questionnaire and interview were used as a method of data collections. Descriptive statistics and inferential methods of data analysis were employed. For Econometric Analysis, Probit Regression Model was used. The descriptive analysis results show that most of the respondents are not comfortable with women decision to participate in transport service sector. Moreover, analysis result from Probit Regression Model revealed that awareness creation training, lack of access to other careers, labor protection and welfare, marital Status of the respondent, salary and compensation and knowledge about labor market are determinants of women participation in transportation service that have registered expected signs and statistically significant results. However, awareness creation training and salary and compensation are the only variables that showed positive signs where as lack of access to other careers, labor protection and welfare, marital Status of the respondent and knowledge about labor market are variables that registered the expected negative signs. Even though most of the women are not comfortable about women participation in transport service sector, the participation is still in progress and this increment may be attributable to improving economic incentives in employment and policies favoring the employment of women. In addition, there are unequal opportunities for employment for both men and women workers in Ethiopia. Therefore, policy statements in the government's gender specific policies should give prior attention to provide women with more opportunities so as to participate in transportation services as well as participation in education and training.

Keywords: Labor force, Women, Transportation service, Guraghe, Probit, Ethiopia

CHAPTER ONE

1. INTRODUCTION

1.1. Back Ground of the Study

Many women feel exposed to poor protection out of homework's, sexual harassment or other forms of unwelcome behavior in public transport service. This is not only morally unacceptable in itself, it also causes economic and social harm, as well as reinforcing other forms of inequality. The international transport forum first launched, at the 2015 international transport forum summit, a series of discussions on women in transport service which provided an opportunity for all stakeholders to highlight their initiatives to enhance greater gender equality in the sector. These discussions have stimulated a number of formal and informal debates since then on a broad range of topics amongst diverse stakeholders, including transport ministers, international organizations, and civil society partners.

The debates on women in transport service at the 2018 international transport forum summit on transport safety and security, its stakeholders to discuss the importance of transport safety and security for women as transport services and employees in the sector. Their contributions, brought together here, highlight key safety and security issues, related challenges and shortcomings, and propose solutions for truly safe, secure, and ultimately inclusive and sustainable transport service for women.

The lowest share of female employment reported is in Land Transport (less than 14 per cent), in which the largest shares of employment are in road and other land transport (e.g. lorry, bus and taxi drivers). Employment in the road transport sector falls below what many observers would regard as decent standards of work and the sector is especially unattractive to women in terms of working away from home, poor protection and safety and the like. To demonstrate this, we can draw on data from the European Survey of Working Conditions, undertaken every 5 years by the European Foundation for the Improvement of Living and Working Conditions, based in Dublin. The survey is based on a representative sample of workers from all EU Member States. The basic framework used in these surveys is to consider four key areas that together create high quality

jobs, as depicted in European Commission (2009) *Report on Equality between Women and Men 2009*, Luxembourg: Office for Official Publications of the European Communities.

Road transport is by far the largest employer in total Land Transport. There are very poor working conditions in land transport in many other countries. In the face of poverty and few, if any, alternative employment opportunities. In the words of a female union official: "If there was a word worse than 'pathetic' then even this wouldn't describe the situation." Besides helping in both reducing unemployment and fertility due to slow down population growth, both inside as well as outside the household(World Bank et al.,2014).

Women decision to participate in transport service is one of the crucial areas that need due attention decision to participate. In fact, the decision to participation rate is not only female labor forces gap indicator but also an economic benefits attribute that aspects of growth, particularly in the less developed countries(Hazri et al.,2015).

The major challenges facing females labor force participate in different sectors most of developing countries in general and in transportation sectors in particular. The overall decision to participate in transport service sectors and employment rates have reduced. The illiteracy affects women to a higher extent due to heavy household workloads, cultural influence and lack of Knowledge. However, it is impossible to think of development neglecting the women decision to participate in transport service. In addition to having different transport services needs, women also frequently unimproved feeling unsafe when using public transport services systems, with decision to participate and robbery being some of the key issue(Gardner et al., 2017; Gekoski et al., 2017).

Ethiopia women have played a traditional role of motherhood and home maker in both rural and urban areas. However, the important roles they play have not always been recognized. Economic development is unthinkable with out women decision to participate; however, because their participation in the economy has not been valued Ethiopian women have not received even their share of the nation wealth(Ethiopian Herald, 2004).

According to Khan & Noree et al.,(2016), women have been disadvantaged in access to material resources like: property, money, and usually have limited accesses to resources and

opportunities and their decision to participate in different sectors, especially in the transport services remains no or low relative to their potential. Due to lack of awareness in our society, women's role has not been recognized in transportation services.

1.2. Statement of the Problem

One of the best Strategies of socio-economic development is to allow women to participate in society's decision making for the reduction of unemployment. They are able to alleviate some of the problems women face in pursuing work opportunities. Given strong norms, almost everywhere in the country against most women decision to participate depend entirely on public transport service to commute. Yet, there is no state-provided decision to participate and it is completely absent in rural areas. In rural, peri-urban and urban areas, the existing public and private transport services are crowded with men; in a society where close contact between the sexes is taboo, riding them is a major social obstacle for women(UNDP et al., 2014).

In all countries, women decision to participate in transport services-related occupations have limited access, whether in terms of road maintenance or access to the profession of bus or truck driver. In developed countries, women decisions to participate in transport services systems face distinct issues and specific threats. In Europe, for example, only 10% of bus drivers are women. This lack of women bus drivers is more remarkable in that, at present, one of the main qualities that bus drivers are expected to demonstrate in developed countries is good relations with customers. And yet women are supposed to enjoy better customer relations. Several previous studies have shown that in difficult neighborhoods there is less conflict in their relations with customers, particularly young customers, as is also the case in the transport of school children(UNDP et al.,2014). Research into this subject in France even showed that hiring tests carried at the reginal autonomus de Transport participation, the main public transport provider in Paris, were geared towards specifically male aptitudes. The European union has made major progress over the past decades, far more men than women are killed in road crashes: only 24% of all road fatalities are women, while the proportion of male drivers killed in road accidents is over 80% in some countries(OECD/ITF, 2018).

A World Economic Forum report presented at Davos in (January et al.,2018), Well-reported events in recent years have highlighted these issues which may discourage women decision

making from using public transport services. Among the women who reported an incident, 80% did not believe that their complaint had negative consequences for the perpetrator, or made the workplace safer. This is a serious concern for women who seek to develop careers in the transport service sector. In economic terms, this is a regrettable waste of talent. Transport policy-makers need to work towards ensuring that women and men are given an equal and fair chance to build a safe and inclusive transport sector of the future.

Social norms in developing countries often prevent women decision to participate for working in the transport service sector. This sector provides many jobs from which women are barred. At the same time, freight transport creates jobs for women. The sale of food alongside motorways for lorry drivers is an income-generating activity for women living in (non-isolated) rural areas, and this service is much appreciated by drivers who need to stop all along their route. Studies have also shown, however, that prostitution also develops alongside roads, and prostitution helps to spread AIDS. Women in many developing countries continue to have reduced access to safe and adequate for decision to participate in transport services, which may potentially limit their mobility and accessibility to economic opportunities. There are undeniable economic benefits attributed to women decision to participate and these benefits have their own inevitable considerations and roles. The major challenges facing most of developing countries that overall decision to participate in transport services sectors and employment rates have reduced. This can be attributed to demographic changes, mainly the reduction of economic activity. There is limited research exploring women's needs and issues concerning decision to participate in public transport services use in developing countries(Kash et al.,2014).

In Ethiopia, women are suffering from traditions and socio-cultural laws. Even though the women contribute in every activity, the majority in transport services for decision to participate hold low status in the society and they have not benefited from their labour equally suffering from political, economic, social and cultural marginalization. They have been denied equal access to education, and gainful employment opportunities would have unequal distribution of resources because they do not exercise their legal and human rights. Even their involvement in decision making is minimal(Geressu Gamma et al.,2016).

Additionally, available evidences suggest that women decision to participate is facing multiple problems with the current transport service environment in Ethiopia. The fundamental attitude towards women's mobility is restrictive and constraints their participation in employment, transport services and society in general. The transport services currently provided by the public and private buses are insecure, unreliable, congested and unsafe. It is difficult for women decision to participate in transport services to compete involving with men for overall space on the buses particularly given the cultural background(Abdelhadi et al.,2015).

Women decision to participate in transport service particularly in our country is facing different challenges though it is not possible to get studies conducted to identify why their decision is getting affected not to take part in transport service sector. Referring different previous studies conducted abroad, however, the researcher had tried to identify and suppose different factors that could affect women decision to participate in the sector.

Considering existing literature gap for Ethiopian perspective and lack of related investigation in this case study area, the researcher have used these supposed determinants as Age of the employment, Marital status of the employment, Gender-specific policies, Awareness creation training on transport services, Lack of access to other careers, Salary and compensation, political power, Knowledge about labor market and Labor protection and welfare to be tested as determinants of women decision to participated in transport service sector. To the best knowledge of the researcher there is no study that have been conducted so far on this title in Ethiopia in general and in study area in particular. It could also be used as an input for comprehensive and rigorous policy oriented to reduce the paucity of research work on the area of transportation economics.

Therefore, this study was the first rigorous that aimed at giving special emphasis on identifying the determinants of women's decision to participate in transport services in Ethiopia by taking Guraghe zone as a case study to fill the existing information and knowledge gap.

1.3. Research Questions

To achieve the objectives of the study, the following basic questions are raised:

- ✓ What are women's perceptions and feelings towards participating in transport services in study area?

- ✓ What are the major factors that affect women's decision to participate in transport services in study area?

1.4. Objective of the study

1.4.1. General Objective

General objective of the study is to examine the determinants of women's decision to participate in transport services in Ethiopia by taking Guraghe zone as a case study.

1.4.2. Specific Objectives

This study has the following objectives:

- ➢ To examine women's perceptions and feelings towards participating in transport services.
- ➢ To examine the major factors that affect women's decision to participate in transport services in study area.

1.5. Significance of the Study

This Study will help the level of women's decision to participation in the labor force in transport service is growing in Ethiopia. However, the trend has provided a set of opportunities and challenges to women as well as to their respective national economies. The result of this study will help to identify women labor force participation in transport service problem of employment and further constraint on working place in Ethiopia, their role, linkage and knowledge flow within the transport service system and influential factors that hamper the smooth functioning. More over it will also help to identify policy issues that influence the women decision to participate in the labor market is one of the most important issues currently facing in Ethiopia and make some corrective measures to improve economic benefit end users. The findings of this study can also be used in guiding policy makers and development planners who are concerned about economic activity in Ethiopia is addressed for women decision to participate in transport service under this study.

1.6. Scope and Limitation of the Study

This study was undertaken in three woredas, namely Enemorna Ener woreda, Kebena woreda and Wolkite town administration which are in the SNNPR for Guraghe zone. Since the

study was limited by time, finance, the research has only been conducted on this woredas and sectors of the considering majority of the employees are located there in it zone.

Given the diversity of the Ethiopian population in terms of religion, ethnicity, agro ecological climate, the communities selected are not representative of all the people in Ethiopia. This research is also delimited to the data collection tools used such as questionnaire, interview and observation. However, the research findings could be used to raise awareness among different stakeholders and also serve as background information for others who seek to do further related researches and would help serve in formulating and revising the system towards women decision to participate in transport services in the study area.

1.7 Organization of the Study

The thesis is organized in to five parts. The first part introduces background, statement of the problem, objectives, scope, limitations and significance of the study. Relevant literatures were reviewed in the second part. The third part discusses the research methodology employed. Results are presented and discussed in the fourth part. Finally, conclusions and recommendations have been made in the last chapter.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURES

2.1. Theoretical Literature

This study was intended to help us develop a better understanding of critical gender issues in order to be able to devise possible interventions. Specifically, this study hoped to uncover the existing situation, outlook and emerging challenges, including current assumptions, cultural attitudes and prejudices regarding women's participation in transport service; it was also aimed athelping us develop a knowledge base and information framework that increases understanding in order to improve women's participation and benefits. These elements include: access to support resources, facilities and services; empowering women's professional relat ionship, agency and voice; and policy (laws and regulations, including informal cultural rulesand norms)(Neupane & Chesney-Lind, 2014).

Similar gender segregation patterns were observed in female participation in transport service value chains within a given sub-sector. For instance, employment gender patterns in the demonstrate that there is a high concentration of women in low-skill jobs and Although the pattern of women being concentrated in lower-skill intensive stages of the value chain ispresent in all sub-sectors, the gap is more prevalent in high-skilled jobs or traditionally male-dominatedsub-sectors such as the equitable decision to participate in transport service and benefits,Data from CAF(2009, 2011).

The major reasons stated included: i) society's perception that women labor force are not good leaders and a biased belief that men are the 'right leaders'; ii) owners and managers perceive management tasks as 'difficult' for women; iii) a lack of gender-responsive organizational systems, rulesand norms (organograms, recruitment and promotion systems); iv) managersbelieve that a lack ofrelevant skills/training are the reason women are under-represented in managerial positions; v) women labor force participating less often in transport service due to low self-confidence, less inclination to take risks than men,and their own self-perception regarding the industry and their capabilities.

2.1.1 Barriers for female employment in transport

A distinction can be made between barriers for transport sector employers to hire more female employees and barriers for employees to apply for a job in transport. This distinction is particularly relevant when considering the measures that can be taken to increase female employment in transport sectors, and the costs related to such measures or to barriers as such (e.g. pregnancy leave legislation). To reduce barriers for employers to hire more women, measures have to be taken at a national or at a sector level. Overcoming the barriers for women to apply for a job in transport, measures can be taken at a national or sector level, or even by individual companies. This presents the diverse set of barriers identified:

Training

Lack of (visibility of) training opportunities for women to gain the relevant skills needed for the specific professions. This can also consist a barrier for further career development and retention in the sector for women already in transport professions. The need to finance one's education or training to acquire the relevant skills, especially when combined with other barriers (e.g. career prospects, a-typical contracts etc.) deters women from pursuing specific professions.**ve**

Barriers from the employees perspective

The use of self-employment or third-party contracts reduces employees' rights, job security and can bring in worsened working conditions that can deter women from entering specific professions. Also, specifically when significant money investments are required to enter a profession reduced job security can be a significant deterring factor.

Job perception

Negative perception of the job either true or driven by social prejudices that associates the specific job with a lower quality of life, the perception of poor career growth, the expectation that experience is expected for certain jobs in the sector or other unappealing characteristics. This is a barrier for both genders, however the expectation of poor career prospects discourages especially newcomer employee groups (such as women) from pursuing transport professions.

The inequality in the provision of education reflectsthe deep rooted tradition and values within the ideological, political, economical and sociocultural structure of societies(Kasente, cited in Takele, et al.,(2008).

2.1.2 Economic factors influencing women participation in the society

The ILO's Global Employment Trends for Women(2012) confirms the pervasive sectoral segregation by sex across Sub-Saharan Africa, noting that while women have made strides in entering the services sector in the past 20 years, they continue to lag in industry.The collection of harmonised or at least comparable statistics or quantitative indicators from transport companies in order to create a statistical analysis of their performance has proven to be extremely difficult. This is not only because companies have different reporting systems and metrics, but also because there is, in many cases, a lack of understanding of what can be measured in relation to gender equality and how this can connect to tangible benefits.

However, the barriers mentioned here compose findings from literature research and the exploratory interview as well as barriers identified in the implementation case studies that have been performed. Finally, it should be mentioned that barriers for employees to apply for a job in transport and barriers for employers to hire women for the vacancies they have can be closely linked to each other. Barriers categorization. From the employee perspective, a diverse number of barriers can be identified for women working in the transport sector(Urtis & Perkings, et al.,(2006).

2.1.3 Differences between males and females involved in a fatigue-related crash or close-call event

Kerry Armstrong, Patricia Obst, Kerrie Livingstone, and Narelle Haworth Driver fatigue is a serious road safety issue(2016). It is well known that excessive fatigue is linked with an increased risk of a motor vehicle crash. The purpose of this investigation was to examine self-report data to identify differences in the prevalence, crash characteristics, and travel patterns of men and women involved in fatigue-related crashes or close-call events. Such research is important to understanding how fatigue-related incidents occur within the typical driving patterns of men and women, and it provides a starting point for exploring experiences from a gender perspective and for understanding the risk of driving when tired.

A representative sample of residents living in the Australian Capital Territory and New South Wales were surveyed regarding fatigue experience and involvement in fatigue-related crashes and close-call incidents. Some concern exists that sleepy or fatigued drivers do not understand the seriousness of driving when tired. It has been noted that drivers who continue to drive when sleepy or fatigued do so for various reasons, including work demands, pressure to reach a destination, and short journey length. This, together with a poor understanding of fatigue-related crash risk, can lead drivers to underestimate the shift from sleepiness to sleep. Interestingly, research suggests many drivers are aware they are sleepy when driving but do not act accordingly to lessen the risks associated with fatigued driving.

A similar proportion of males (68.9%) and females (64.9%) reported having felt sleepy while driving in the past 5 years. A significantly greater proportion of males (20.8%) than females (12.7%), however, reported having had a close call when driving tired. The majority of both females and males who had experienced a close call had experienced fewer than two such incidents, and about 20% of both genders had experienced three or more close calls. Females were slightly more likely to have experienced only one close call, whereas males were slightly more likely to have experienced five or more close calls.

Results from this research indicated no gender differences in the symptoms of tiredness experienced or in the types of counter measures used to combat tiredness; however, key gender differences were observed in the purpose of the trip, time of driving, and trip distance away from home when the incident occurred. Currently, interventions targeting driving when tired focus on longer trips and monotonous stretches of road, whereas the results from this research suggest that females may be more likely to experience fatigue-related incidents closer to home. Given that the safest countermeasure is for a person to driver behavior and crashes 31 stop driving, that half the sample continued driving indicates more education in this area is necessary.

2.1.4 Lack of training opportunities for women by transport

Lack of (visibility of) training opportunities for women to gain the relevant skills needed for the specific professions. This can also consist a barrier for further career development and retention in the sector for women already in transport professions. Investment needs for education and training. The need to finance one's education or training to acquire the relevant skills, especially

when combined with other barriers (e.g. career prospects, a-typical contracts etc.) deters women from pursuing specific professions. A number of Open Days for women drivers were held by Dublin Bus as part of their most recent bus driver recruitment campaign. The women were given the opportunity to drive a training bus, supervised by the training instructors, around a short course in the depot yard (Budd, L., & Ison, S. et al.,(2015).

2.1.5 Creating gender-sensitive public transport for women

Safety and security for women in public transport is soon going to become a prerequisite of any effective transport system rather than a unique "selling point". If advancing women's equality and then we must acknowledge that getting women to work safely will be critical to closing gender gaps in work and society.

Safety will play a key role in attractiveness, and hence the economy of public transport. Shortly after Singapore announced a freeze of vehicle count in 2018,Occupations in transport include both mobile transport occupations (e.g. pilots, drivers, assistants, inspectors, and conductors), and non-mobile transport occupations (e.g. mechanics, engineers, and managerial positions including middle management positions). Within the category of mobile transport occupations, the study distinguishes in particular between short and long distance mobility, and uses overnight stays as criterion. When there is no overnight stay it is considered to be a short distance mobility job and when there is an overnight stay, it is considered to be a long distance mobility job. However, data allowing this distinction is very scarce.

Where relevant, further focus lies with transport services modes and occupations where women are clearly underrepresented. The next section intents to clearly define which type of occupations fall under this category for each transport services mode. In order to get an initial idea for which type of occupations this holds, data from the fifth European Working Conditions Survey (EWCS) from 2010 is used

This will not be practical or possible for the vast majority of employers; moreover, it would not be possible to provide the level of qualify required, or to maintain appropriate standards that would urge women to make use of such facilities (Premaratne, et al.,(2011). The availability of such facilities, preferably at a community based level, which could have ripple effects on other aspects of the work-life balance.

2.1.6 The career cycle for women in different transport sectors

The framework set out in the career cycle and cause-effect relationships at each stage is designed to be a practical tool for policy-makers and the social partners to promote the employment of women in the transport sector, both in terms of the numberand quality of jobs ILO, 2013. Using this framework, it is possible to consider the career cycle ofwomen in different transport sectors in different countries, always bearing in mind the inter-connections and inter-dependencies between the different stages in the cycle. This is particularly important when designing policy interventions to enhance employment opportunities for women and mitigate any current or subsequent barriers they may face further along the career cycle.

The career cycle must always be seen as precisely that a *cycle* with no short cuts. At the most practical level, policy interventions can be designed for specific jobs or professions within a transport sub-sector (e.g. policies to address the barriers facing women cabin crew in the low fares sector of the civil aviation industry or bus drivers asopposed to tram drivers in urban transport), although the starting point for thegovernment and any national tripartite institutions for transport and employment (including equality) is usually the identification of common issues (barriers) that affect women in allsectors (e.g. low take-up of STEM subjects at school, legal restrictions on the working timeof women, limited maternity protection, poor health and safety protection, etc.).

The reportof the 8th ITF Asia/Pacific Regional Conference, for example, noted that:"Whether the women come from the port and docks, aviation, railways or road, the issuesand challenges being faced by them are virtually the same in the region, only their degreesvary. Gender bias, unequal opportunities and responsibilities, wage disparities, lack of sanitation and rest room facilities, violence, sexual harassment and bullying and women'svoices not heard are some of the issues unanimously raised by the regional women,irrespective of the sectors they came from."82 Despite these commonalities, which have been outlined in Section II, some stages in the career cycle are more critical than others depending on the specific transport sector, the different job categories within the particular sector, and the region or country in question.

In some transport sectors/countries, working conditions fall well short of national and certainly international standards of decent work, such that any immediate investment in attraction would

probably be lost at the stages of selection and/or (initial) retention. Forexample, working conditions might be so poor (e.g. dirty, dangerous, physicallydemanding) that they are not considered by men to be 'suitable' for women, such that sex discrimination at the selection stage might become an almost in surmountable barrier.

2.1.7 Compensation (Salary)

One common cause of low female employee rates is low pay and benefits package. When a worker is employed in a low-wage position with limited benefits, there is little incentive to stay if a similar employer offers even a slightly higher rate of pay. Workers who make more, but whose salaries fall short of the going market rate, may feel undervalued at their current companies and look for a company that will pay them what they're worth. Employees quit from organization due to economic reasons.

The most common reason for employee turnover rate being so high is the salary scale because employees are usually in search of jobs that pay well. Low pay is good reason as to why an employee may be lacking in performance. Unequal or substandard wage structures fall under this category as well. When two or more employees perform similar work and have similar responsibilities, differences in pay rate can drive lower paid employees to quit. If you pay less than other employers for similar work, employees are likely to jump ship for higher pay, if other factors are relatively equal. In line with salary and benefit packages, assistance or voluntary benefits provided by the organizations encourage employees to stay in the company (Rion et al.,2009). Organizations also used such assistance for creating good relationship in the organization with employees(Shukla & Sinha, et al.,2013).

2.1.8 Gender-specific policies

The provision of dependent care, especially high-quality child care, is one of the most important enablers of women's economic empowerment. Women around the world report that care responsibilities keep them from joining the labor force and being more productive workers, and evidence shows that the availability of low-cost child care promotes labor force participation among women (Angeles et al. 2014). It is not clear, however, that child care reduces the total time burden for women, and some evidence shows that women who work outside the home do more total work than women who do not (Samman et al. 2016).

In addition to giving women more freedom to work and more peace of mind at work, expansion of child care services typically increases the number of jobs available to women, although these jobs do not pay well and may reinforce the gender segregation of the workforce. » Change laws: Studies show that the reform of inheritance and family law to lift prohibitions on daughters' legacies and to reduce husbands' power over their wives' economic activity have positive effects, some of which go beyond the specific outcomes reforms intend to address.

2.1.9 Woman's age group

Age-specific employment choices for women. Employment probability in the wage sector tends to show not much variability for women between 20 and 49 years, and is in the neighbourhood of 10%. Thereafter the chances for suchwage-employment jobs decline. It is difficult for women over 50 years to compete forformal sector jobs. With the exception of isolated dips, a somewhat increasing employment probability for self-employment prevails for females as we move from younger age cohorts to older ones. On the other hand, employment probability for unpaid family labour falls from about 27% for women in their early twenties to 20%for those over 55 years. A plausible explanation for this pattern seems to be that as women mature, there is a need to earn income to supplement the family income (in thecase of married women) or support the family (in the case of currently single women), thus a movement away from unpaid family labour. As to whether a woman ends up inwage employment or self-employment depends on various factors, notable among which is her education level(Harry A. Sackey , 2015). How does this education pattern interact with female labour force participation and fertility? The answer to this is somewhat provided .

Age specific fertility rates for the three cases (no schooling, primary, post-primary). Education differences exist, such that the higher the education level, the lower the fertility. In line with theoretical expectations, schooling tends toplay a crucial role in fertility decisions in general, and in the number of children that would be obtained in particular. Nationwide, fertility patterns indicate fewer children as higher levels of education are attained. That women with no schooling what so ever have as many as 5.9 children by the time they are in the age 40–49 cohort. For this same older age cohort, however, women with post-primary education have,on average, about 3.5 children. Primary schooling, on the other hand, tends to represent an intermediate situation with

about 4.8 children. This gives credence to the assertion that fertility in Ghana is still relatively high.

While the participation rate for the age group 15-19 years declined between the years 1980 to 1985 due to increased enrollments in secondary school, the other age groups of 20-24 years increased their participation. The decline in the participation rate after the age of 24 is related to marriage and the start of an active reproductive life. There are no significant additional incentives for women to re-enter the labor force at after age, which is why there is no rise in participation among women over 40 years.

2.1.10 Wage gaps of women labor force participation

Available data show that wage gaps remain large between men and women, which may lower female participation especially at very low wage levels (reservation wage)(OECD 2014). Depending on sectors the wage gaps vary across education categories but with no clear pattern. The most striking wage differentials are within the white-collar services (financial and business services, public administration, education, health and social work). This would suggest that e.g. the public sector lags badly behind in equal pay despite the existence of equal pay laws. Female participation is also affected by lack of job growth over the past decade despite robust GDP growth. While male jobs grew by 25% between 2000 and 2012, female jobs barely increased. The labor market and higher school attendance "absorbed" fully the estimated net increase in male working age population over the past decade.

At the same time, about 70 million women dropped out of the labor force as available jobs were scarce (net of the rise in school attendance). Most of these were unpaid self-employed workers in agriculture. As a result female labor force participation declined from 38% to 32% of female working age population over the period. The sluggish growth of jobs overall and especially for women point to demand problems explaining part of the low female labor force participation. The high unemployment rate among educated women in both urban and rural areas also suggest that many women would like to work if suitable jobs were available. The low growth of jobs, male or female, may reflect the impact of the stringent labor laws in promoting capital intensive activities especially in manufacturing (Gov. of India 2013, CRISIL 2014, OECD 2014). Another factor can be skill mismatches as many entrepreneurs complain that for example university graduates do not always have the required skills (CRISIL 2014).

Willingness to work is also evident from survey questions, in which many women have responded that they would like to work given the right opportunities. In 2012, almost 32% of women "performing domestic duties" (a survey definition) outside the labor force said they would be willing to work either part time (73%) or full time (22%). Many were also interested in occasional job opportunities (NSSO).

2.1.11 Marital Status Distribution

Marital status is important to be examined because it has an influence on women labor force in transport service and labor force marketing. Sunga Chalwe et al.,(2011) marital status distribution of the sampled employeesAs the majority of employees enganged in transport service were monogamously married which accounted for 72.61%. Polygamously married participation accounted for 7.18%, widowed accounted for 14.75%, divorced employees were 3.35%while 1.72% were separated and the least were the single accounting for 0.38%. In general about 80% of labor force participation were married. Jari associates married household to stability in the household and labor force participation (Jari et al.,2005).

2.1.12 Gender awareness training

Description of the measure gender awareness training, mandatory and included in every course. Barriers the measure aims to overcome corporate/Working culture or entire workforce. The gender equality plan has managed a number of achievements in the last years. Specifically: Increase in female staff in Managing positions: now adays there is one female managing director in the company after 70 years (Consultancy, Mrs. Marta Serrano); and Since 2017 there is the first female General Manager of Operations Centre (Caranbanchel, Mrs. Lidia León); Increase in female job applications: the new call for drivers is in process. No numbers are available at this moment. However, in 2016, in the central offices 4 people were hired following the new protocol. 3 out of 4 were women. One of them was 7 months pregnant. Since 2007 this protocol has been implemented to hire workshop personal; Inexistence of pay gap, due to wages tables according to years of experience, post and category. Within the transport sectors, employees are employed in different types of occupations.

These are important to take into account in the analysis for the reasons of both horizontal segregation [between occupations] as vertical segregation [career progression]. The status of

horizontal and vertical segregation for the different type of occupations within the transport sector is described with the existing documentation available and the results of the explanatory interviews. Hereby the aspect of career prospects and promotion receive special attention. From WISE 7 some detailed results are available regarding the share of female workers in urban public transport: The proportion of women employed in the urban public transport sector is 17,5% in average of the analysed companies (ranging between 5% and 30% in individual companies) as indicated above; Female workers are especially under represented in top leadership positions and in technical professions (e.g. drivers); Female workers are more or less equally represented or even over represented in two employment categories: - In administrative professions (e.g. business administration, human resources, marketing or communication) which can offer good jobs and career opportunities for women in the sector; - In low skilled professions, (e.g. ticket office/cashier, cleaning service, gate staff).

2.1.14 Security and Criminal Justice

Interventions focused on security, criminal justice, and crimeand public safety are clearly critical in determining female labor force participation. The issues of physical safety they address are interlinked with norms that affect women's mobility and labor force participation. Indeed, if women are confident that they can travel to and from work safely, they may be much more likely to consider taking up work outside the home. Improving public safety for women is crucial to improve their mobility. Institutionally, women's representation is also important; when women get into leadership positions, crimes against women are reported more frequently (Iyer et al. 2012). If and when the local government system is revived in Pakistan, this would be another reason to keep the women's reservations in that system.

Recent statistics of the International Workers' Federation show that women account only for an estimated 2% of seafarers' world wide24. At the European level, women make up a 20% of the total workforce in the water borne sector (Eurostat, 2017) 25 but it needs to be noted here that this figure includes women working onshore (e.g. in offices). In addition, the proportion of the women seafarers between European Countries varies significantly. More specifically, a survey from ILO carried on by the Seafarers International Researcher Center in 2003 shows that in Scandinavian countries women account for more than 10% of the seafaring labor force, 8.3% in

the UK, 4,2% in Germany, when for other European countries the figures are negligible (Sulpice et al.,2011). The majority of the women are occupied in the service and catering sectors while the proportion of women to the top of the ship hierarchy is significantly small. For instance, in 2001, among the 1,603 German ship leaders or captains there were only 4 women (Dragomir et al., 2012).

2.2 Empirical Literature review

According to (Huselid et al.,1995), prior work has observed the determinants of women's decision to participate employees' departures and collective in transportation services, although most of the previous work has focused on the former. For example perception of organizational culture, perception of job security, the occurrence of a union, compensation level, job satisfaction, awareness and knowledge ,demographic variable such as age, gender, education, organizational commitments, whether a job meets an individual's expectation or not were all predictive of women's decision to participate employees Studying about factors affecting rate.

UK Department for Transport(2004), the primary research question in this study is: Can regulation (laws) support implementation of gender equality decision to participate in transport service by policy. The focus is on legislation,which consists of rules that have an impact on the decision-making process concerning the establishment, design and administration of the transport service sector. The theoretical and methodological approachesused in the study are feminist legal studies and sociology of law.

Gilfillan, G. and Andrews, L. et al.,(2010), *Labor Force Participation of Women Over 45*, Productivity Commission Staff Working Paper. The data for this analysis are taken from the ABS Labor Force Survey, which provides data on the age and employment status of the population for the period since 1966. There are eighteen 5 year cohorts ranging from those born between 1901 and 1906 and those born between 1987 and 1991. The older and younger cohorts have fewer observations than other cohorts, but no cohort can be tracked throughout its working life the length of a 40 year data base is clearly too short to capture any cohort's entire working life. provides the results of various model specifications for women's participation rates.

The short term fluctuations of the labor market as represented by the variable unemployment were not found to have had a significant impact on women's participation rates. All models

describe a close fit between actual and estimated participation rates for women. The estimated cohort effects describe a process of upward shifts in the life cycle participation curve with stronger cohort effects for older age groups. Model 2 is the preferred model which captures these age and cohort effects with parsimony.

In both India (Deininger, Goyal, and Nagarajan et al.,2010) and Ethiopia (Hallward Driemeier and Gajigo et al.,2015), legal changes in favor of gender equity led to a rise in the average age at marriage, an outcome not specifically targeted by the legislation. In Rwanda, reform to the land tenure system to ensure women without marriage certificates do not lose their rights over land has also led to positive outcomes for unmarried women.

Lapar et al. (2012), analyzed policy options promoting decision to participate of women in transport services in Ethiopia with the objective of designing appropriate policies to effect benefits. The results revealed that, number of employees, professional training, technology, availability of funds, availability of alternative occupations, and expansion service significantly affected factors‟ market decision to participate.

Tanuir, Shahind et al.,(2012,) established that most of the employees are not satisfied with their jobs and not motivated particularly women's decision to participate and for this in transportation services is high. The women are dissatisfied with their job security, social status, cultural norms, visit to private sectors, any target for income generate activities, no room for family, not getting the retirement benefit and not getting the family insurance support. The discussion of women economical empowerment, particularly through labor force participate and productivity enhancement, must be situated within specific contexts of economic growth. Like any societal transformation, growth creates winners and losers that determine how women economical empowerment affects gross outcomes at the household and societal levels (Fox et al.,2015). In countries experiencing rapid economic growth, the constantly increasing demand for labor and availability of better-paying jobs ensure that women economical empowerment does not become a zero-sum game between men and women. In other words, when the economy demands more workers, greater female inclusion in the labor market is less likely to adversely impact male counterparts.

Kyiv et al.,(2012), *women's participation in the labor force in ukraine.* Work accessibility for women in the most general dimension, can be estimated through the indicators of the number and structure of the employed and unemployed as well as employment and unemployment rates. Throughout 2000-2011, the number of women in employment remained almost unchanged, varying within the range from 9.8 million in 2011 to 10.1 million in 2005-2008; in the last three years, the indicator has begun to lessen. The number of men in employment changed in a more dynamic way and directionally: during 2001-2008 it increased from 10.2 to almost 10.9 million; in the crisis year of 2009 it dropped by more than 0.6 million, but in the post-crisis years it has demonstrated a tendency to recover. When analyzing employment, special attention is paid to the situation of young persons aged 15-24. An important stage of the socialization of young generations falls on this age interval transition from childhood to adult life, from training to economic activities (employment), searching for first jobs, etc.

Tolciu and Zierahn et al.,(2012), find that, ceteris paribus, social and cultural norms play a central role in determining the extent to which women make use of available economic opportunities. In conclusion, economic growth is a necessary but insufficient condition for improving women economical empowerment. This is why national governments, donors, and multilateral institutions implement the gender-specific policies that we discuss later. In a recently published empirical study based on rigorous analysis of data from Nigeria, Salmon and Tanguy et al.,(2016) add a nuance to this literature they claim is based on "the strong but questionable assumption that labor supply decisions are independent within the household." By arguing that the labor supply decisions of husbands and wives are highly intertwined-contrary to earlier studies they find that husbands end up working more hours than before electrification, resulting in "an increase in non-income generating activities (leisure or housework) for wives." This argument posits that when one spouse spends more time outside the home, the other likely substitutes by doing more household work. But while this is undoubtedly an important new finding in this literature, the authors warn that findings could be influenced by the poor quality of power supply in Nigeria. They may not apply to other (e.g., urban) contexts, where greater use of time-saving household appliances afford women more time to potentially undertake greater economic activity.

Eswaran *et al*.(2013), *"Female labor force participation declining so sharply* in India. The Oaxaca-Blinder decompositions were carried out to compare changes across consecutive survey years. Thus, the surveys in 1994 and 2000; 2000 and 2005; and 2005 and 2010 were compared with one another. The pooled probit model for rural areas shows that women with pre-primary to secondary education, and women aged between 15 and 19 are less likely to participate in the labor market than other women. The comparison of the standard probit model with the heteroskedastic probit model shows that unobserved residual variance across socio-economic groups and survey years does matter.

In particular, the results imply that the residual variance is highest among women with tertiary education and for the age group 55-64 years. This means that preferences for market work among women with tertiary education are more heterogeneous than among women with lower educational attainment. This heterogeneity may be due to conflicts between a woman's higher expected market wage and household norms pertaining to female seclusion amongst higher castes. Another explanation for this heterogeneity is the conflict between higher expected market wages and the lack of job opportunities in certain areas. The survey in 2010 generally exhibits more residual variance than previous survey years. This could also be a sign of a decrease in available job opportunities or a sign of underlying measurement issues. However, the source of the effect cannot be directly assessed.

Gunatilaka et al.,(2013), analyzed data from the Household Income and Expenditure Survey 2009/10 of the Department of Census and Statistics to investigate the probable drivers of married women's participation decisions. She found the following factors to be positively and significantly associated: age; educational attainment from GCE Advanced Level and beyond, with a U-shaped relationship between education and participation grazing secondary education at its lowest point; higher per capita household consumption; a higher share of employed females relative to males with the same educational attainment as the individual, in the district; and whether respondents were living on estates. Having children later rather than earlier was also found likely to be an important factor. Constraints to married women's participation were found to be remittances from abroad; Islamic Moor ethno-religious identity; disability education up to GCE Ordinary Level; the presence of children less than five years of age; the employment and

education characteristics of male household members and male head of household; and, more people employed in manufacturing and services, relative to agriculture in the district.

Peter T.et al.,(2013), International Labor Organization, the EU average for part-time working (<30 hours per week) was 31.4 per cent amongst women compared to only 8.1 per cent for men. Although part-time and other flexible working arrangements may reflect personal preferences, the unequal share of domestic and family responsibilities leads more women than men to opt for such arrangements. The employment rate of women falls by 12.4 points when they have children, but it rises by 7.3 points for men with children, reflecting the unequal sharing of care responsibilities and the lack of childcare facilities and work life balance policies. In the EU more than 6 million women in the 25 to 49 age group say they are obliged not to work or to work only part-time because of their family responsibilities. See European Commission (2009) *Report on Equality between Women and Men 2009*, Luxembourg: Office for Official Publications of the European Communities.

Turnbull, P. et al.,(2013), Public transportation and city infrastructure development is another policy tool particularly relevant for enhancing women's mobility. They could alleviate some of the problem's women face in pursuing work opportunities. For this reason a reporting method needs to be created. Taking measures to eliminate it is the next step and relates to establishing specific and transparent pay-ranges and objective criteria for wage levels along each profession. Also policies to eliminate the pay gap across the whole company should be expected. These can include measures to promote more women so as to achieve gender-balance across the highest pay-scales.

Harry A. et al.,(2014), "*Female labor force participation in Ghana: The effects of education"* this section we present the results of estimations of two types of models a probit model and a multinomial logit model. Women's marital status is significantly and positively associated with their probability of participation, irrespective of whether they reside in rural or urban areas. This is not surprising since it is common to see married women in Ghana being assisted financially by their husbands to engage in various economic activities. Some sort of household budget sharing occurs eventually, with such married women assuming financial responsibility for some specific household needs. Our data show that about 40% of married women in urban areas are engaged in

wholesale and retail activities. An additional 20% are in small-scale manufacturing activities, mainly food processing. In rural areas, on the other hand, about 73% of married women engage in agriculture and livestock activities. The urban impact of being married on female participation exceeds the rural by three times. For both urban and rural married women, the husband's post-primary schooling tends to have a significant positive effect on the probability of their participation.

Uma D. et al.,(2014), in a systematic review of impact evaluations on violence against women, found that over 70 percent of studies were focused on industrialized countries. A more recent review by Ellsberg and colleagues (2015) also points to major gaps in our understanding of this issue in low- and middle-income countries, mainly due to the lack of rigorous impact evaluations. Much of this literature, including studies discussed by Mejia and colleagues (2016) focus on how various programs and development-focused interventions effect the incidence of violence. For instance, Raghavendra and colleagues (2013) find intimate partner violence causing worker absenteeism, resulting in economic losses of 1.27 and 1.28 percent in Uganda and Bangladesh, respectively.

Ribero and Sánchez et al.,(2014) estimate that 0.85 percent of Colombia's GDP is being lost to violence against women, while Pronyk and colleagues (2006) found that microfinance programs in South Africa reduced intimate partner violence by 50 percent. The incidence of sexual violence against women has direct impacts on their labor force participation, which Sabia and colleagues (2013) find to be 6.6 percent besides 5.1 percent reductions in wages. Thus, violence against women directly impacts productivity for both individuals and entire economies. Uma Devi et al.,(2005).

Tomski, P., Lis, T., & Bajdor, P. et al.,(2014), the need to finance one's education or training to acquire the relevant skills, especially when combined with other barriers (e.g. career prospects, a-typical contracts etc.) deters women from pursuing specific professions. They also got a tour of central control and received information on the recruitment process for bus drivers and on the benefits of working for the company. Current female bus drivers and inspectors acted as guides on the day to answer any questions the participants had about working for Dublin Bus according to European commission. Lack of corporate policies for gender-balance recruitment or to

facilitate women in the workplace. Also the absence of support mechanisms for women in male-dominated professions and the absence of role models.

Johansson de Silva, Paci, and Posadas et al.,(2014), a survey of participating firms in Mexico indicated some limited success (Castro et al.,2007), even in the very short term. The model is being formally promoted by the government in Chile and Mexico (Pungiluppi, Castro, and Munoz-Boudet et al., 2010). Implementation in Egypt was accompanied by a quasi-experimental evaluation. The evaluation did not show any effect on firm hiring or promotion, although treatment firms exhibited better employee satisfaction. Because gender economical empowerment of Mexico is being implemented in several places, it would be ideal if these implementations were accompanied by rigorous evaluations. Such evaluations are one of the few ways that rigorous evidence can be brought to bear on whether or not there is a strong business case for women economical empowerment. It is important that these evaluations gear up for the long or at least the medium term, because one would not expect changes in productivity and other indicators of success to happen immediately after certification.

Arango and colleagues et al.,(2014), find intimate partner violence in a systematic review of impact evaluations on violence against women, found that over 70 percent of studies were focused on industrialized countries. A more recent review by Ellsberg and colleagues et al.,(2015) also points to major gaps in our understanding of this issue in low- and middle-income countries, mainly due to the lack of rigorous impact evaluations. Much of this literature, including studies discussed by focus on how various programs and development-focused interventions effect the incidence of violence. For instance, Raghavendra and colleagues (2013) find intimate partner violence causing worker absenteeism, resulting in economic losses of 1.27 and 1.28 percent in Uganda and Bangladesh, respectively.

Kash et al.,(2014), limited access to safe transportation is one of the greatest challenges to labor force participation faced by women in developing countries. There is limited research exploring women's needs and issues concerning public transportation use in developing countries. Lack of corporate policies for gender-balance recruitment or to facilitate women in the workplace. Also the absence of support mechanisms for women in male-dominated professions and the absence of role models. The study found that many women would like to work; there are multiple reasons

why they do not. One of the key reasons on which policy could have an effect is that women face restrictions on their physical mobility outside the home.

Arthur Mbogori et al.,(2014), Without sufficient social capital, women find it difficult to build an independent economic status and hence have limited development projects. women are generally not able to benefit from the principal output from the pastora1ist economy, despite playing varied and often unacknowledged roles in transport system and relative production.

The role of women decision to participate in transport service to shaping economic opportunities. Women has not been explored in the literature to-date, and to the best of our knowledge, there are no causal studies looking at the effects of these investments on women´s labor force market outcomes. This study thus makes in fact many important contributions to the literature. First, it contributes to the limited causal evidence on the impacts of transport systems on employment. Second, and more importantly, it presents novel empirical evidence on the impacts on women that improved service systems in transport can generate. The context of women's decision to participate in transport service rates globally aresignificantly lower than those of men and should, therefore, be addressed to boost economic growth. Lack of access to safe transport service hasbeen identified as a particular constraint to women's decision to participate in the different countries for different reasons(Anand & Tiwari et al.,2007).

Rosemary A. et al.,(2014), which have done *Female participation in the labor market.* A model that permits the identification of characteristics of individuals participating in different activities in the labor market is the multinomial logit model. It estimates the probability of individual ***i*** participating in sector ***j*** given a set of explanatory variables. In this labor section market, we present The reference t results category of the regression y for participation analysis if take female azoth participation unemployed in category (Liao, 1994; Mwabu and Evenson, 1997). This category consists of an economically active population that is without regular employment but it is actively seeking work (central bank system, 2002). The assumption of the independence of irrelevant alternatives IIA was tested and it holds for the data. We see that female participation in the public and private sectors is likely to increase with age, years of schooling, being a household head and being in the urban areas.

Verick et al.,(2014), as a consequence, women in many developing countries continue to have reduced access to safe and adequate public transportation service, which may potentially limit their mobility and accessibility to economic opportunities. not equal decision to participate between women and men is also a reality and it is more sharply observed in developing countries. While a myriad of socio-economic and overlapping factors affect the decision and ability of women to engage in the labor market. Including the level of economic development of cities, individual educational attainment, social dimensions such as social norms influencing marriage, fertility, and women's role outside the household, and institutional settings laws, protection, benefits.

Guenivet, A., S. Jamin and T. Rousseau et al.,(2015), "Transportation, mobility and safety: A matter of gender" confirms that men and women do not use the same travel modes, neither at the same frequencies, nor for the same reasons. This difference occurs throughout life women give up driving earlier than men do and may be partly the result of a higher risk perception among women. Thus, women feel less safe and secure in public spaces and when using public transport. Their risk perception and the stereotypes on women behind the wheel may explain some of their mobility choices - such as their low attraction to powered two-wheelers - as well as their behavior as drivers, riders or pedestrians, or their lower achievement in the practical driving license test. The dossier shows how considering women in transportation research can bring new perspectives on old issues and redefine existing problems. Placing women as subjects for transportation research also allows considering them as active participants in the definition of urban and transportation policies.

Domingo et al.,(2015), Women's ability to organize with others to enhance economic activity and rights ('power with') is key to women's economic empowerment. Collective action takes myriad forms and is strongly associated with improved productivity, income and working conditions, through changes to workers' rights, wages, social protection and benefits. Furthermore, where group objectives focus specifically on changing social norms, such as restrictive attitudes towards women's work and property ownership, collectives can contribute towards boosting women's self-esteem and their identity as citizens. This in turn can lead to transformational gains for gender equality in the community and within broader political structures.

Asian Development Bank (2015), "A safe public transportation environment for women and girls". Rapid assessments undertaken in the three cities indicated that a high proportion of women have experienced sexual harassment. Among women who responded to the question about whether they had ever been touched, followed, stared at, or become a subject of anyone's inappropriate behavior while riding the metro or at the terminal and its environs, 69% out of a total of 630 respondents said they had experienced such harassment while using public transportation. Of the respondents surveyed in Baku, Azerbaijan, 81% said that they had experienced some form of inappropriate behavior.

In contrast, a much smaller proportion of respondents(45%) in Tbilisi, Georgia, reported that they had experienced being sexually harassed, although the question limited respondents to their experience in the previous 6 months. In Karachi, Pakistan, however, 78% of the respondents had felt harassed or uncomfortable at some point while using public transportation in the previous year. Even using the lowest incidence rate, where the metro carries 85,000 commuters per day, and assuming that 50% of these commuters are female, the responses indicate that there will be 3,800 sexual harassment incidents per day, 211 per hour, or between three and four women sexual harassment targets every minute on the metro, for an incidence rate of approximately once a week per female commuter.

Tudela Rivadeneyra et al., 2015, a handful of studies examine these security issues in informal versus formal public transit. For example, in a study conducted in Mexico City, female respondents said that the informal transport service was the most unsafe mode and that higher-quality public transportation (scheduled service, defined stops, cleaner buses) will lead to safer trips. In Bogotá and Arequipa, riders of informal transportation services identified crime as one of the principal problems with the system, which was tied to the crowding during peak hours. In Bogotá, women were significantly more concerned about crime than men (Kash, 2014). Women in the slums in Delhi identified themselves as targets of sexual harassment while traveling to work, especially when walking to the stops of informal and public transportation, which in some cases affected their ability to retain jobs in distant areas from their homes (Anand & Tiwari, 2007).

Cavalcanti and Tavares et al.,(2015), labor markets are 'complex institutions shaped by social norms, discriminatory forces and power inequalities.' Many of the barriers to women's access to quality employment are found within labor markets local to where they live. Ensuring that women can access better jobs and benefit from new labor market opportunities arising through growth is crucial for achieving women's economic empowerment. Labor markets globally are characterized by gendered inequalities and discrimination, which vary significantly by region and country. A range of factors have a negative impact on women's labor market outcomes, including social norms around what kinds of work are deemed suitable for women and men. The effects in terms of wages and overall output can be sizeable(Cook and Razavi, 2012).

Yanjuan et al.,(2016), personal factors include age, gender, education level, marital status, women decision to participate in transport service sector is lower. Therefore, in this study the researcher tries to analyze these relationships, identify the influence of independent variables on the dependent variable and also tries to identifythe influential factors of Women's decision to participate in the transport services of the area under study.

H. Elizabeth Peters, Nan Marie Astone, Ammar A. Malik, Fenohasina Maret, Caroline Heller et al.,(2016), review summarizes the evidence that women's economic empowerment promotes economic growth, firm productivity, and human development. It also reviews the key enablers and barriers to WEE. We have followed strict criteria regarding the rigor of studies included in this review. One of a series undertaken by the Growth and Economic Opportunities for Women Grow to inform its engagement with and provide evidence to the UN High Level Panel on Women's Economic Empowerment. One practice to promote gender equity in the formal employment sector is certification of firms as gender equitable. One model for this is the gender equity model developed by the World Bank, whereby companies volunteer to earn an official certification as a gender-equitable firm. The goal is to institutionalize gender equity by assessing and amending processes regarding recruitment, training, women's advancement, and sexual harassment (Castro et al.,2007). The model was initially implemented in Mexico and has since expanded to Chile, Argentina, the Dominican Republic, and Egypt (Pungiluppi, Castro, and Munoz-Boudet et al.,2010).

Eurostat (2017), aviation has been more successful than the other transport modes regarding gender equality. More specifically, women employees account for 40% of the total workforce in air transport in Europe. However, the majority of female employees in aviation work in customer service and administrative roles while in senior roles their proportion is still statistically sparse. In particular, only 3% (4,000 out of 130,000) of the airline pilots worldwide are women, and only 450 of them are captains. Among European Union countries, women make up 42% of the persons employed in passenger air transport, when the proportion of women employed in freight air transport and airport operation and handling is 23% and 26% respectively (Gleave et al.,2015). At the same time, there are significant variations in employment levels between EU Member States. In 2013, three quarters of the total air transport employment in Europe was concentrated in Germany, France, the UK, Spain, Italy and the Netherlands meaning that the employment of women in the this sub-sector is heavily influenced by a small number of MS (Juul et al.,2016).

Byron et al.,(2018), *Women's travel issues. Proceedings from the Second National Conference*, In urban mobility, advocacy international association of public transport signed a memorandum of understanding with the World Bank to collaborate on safety and security of women in public transport service and to advance the achievement of common objectives. Advocacy international association of public transport and the World Bank are working on the development of a toolbox to support gender mainstreaming in public transport. In the same context, World Bank and UITP successfully launched the *Public transport service for me* campaign on the 2018 international women's day. More than 180 public transport service authorities and operators in over 75 countries broadcasted the video and disseminated posters and flyers on their network to raise public awareness on gender issues in public transport service.

Additionally, UITP is conducting substantive work to encourage and support public transport stakeholders to tackle the gender issues in a comprehensive and realistic way. Our approach is twofold: women as decision makers and public transport employees, and women as public transport customers. These perspectives are directly intertwined: by ensuring gender equity at all levels of public transport development, women’s concerns as travellers will be better taken into consideration.

Daniel Martinez et al.,(2018),have done the research on "*The Role of Public Transport in Promoting Women's Employment in Lima*" We estimate the impacts of the introduction of the BRT and Line 1 on employment outcomes using a difference-in-differences approach. Since the BRT and Line 1 operations had a slow ramp-up since their official opening in 2010 (BRT) and 2011 (Line 1), it is of interest to understand the timing of the effects of the two systems. The standard difference-in-differences model, allowing for time heterogeneity in effects, would be: As our interest is in the differential effects for men and women, we could either estimate (1) separately for men and women, and compare the respective coefficients, or modify (1) to allow for an interaction with a *female* dummy variable. To improve efficiency in our estimates we opt for the interacted model. This allows estimating the following model to capture the heterogeneous effects on women.

World Bank (2018), Economic Gains from Gender Inclusion: New Mechanisms, New Evidence. This paper's estimates of the complementarities between women and men in production suggest that, had Morocco increased female decision to participate as much as Ireland did over the past few decades, total factor productivity growth might have been boosted by some 0.4 percentage points per year, and GDP would also be a third larger. In countries where female decision to participate has grown fast, such as Brazil or the Dominican Republic since the early 1990s, female employment was supported by an expanding services sector, which grew from generating about half the jobs in the economy to supporting two-thirds of economy wide employment. By contrast, to take the example of Egypt, female decision to participate has been stagnant over this period, with only 16 percent of working-age women participating in the labor market, and a services sector that barely supports half of the economy's employment.

This paper's model suggests that the barriers to female labor force participation in Egypt are equivalent to an additional tax rate of about 50 percent on women's labor income. Removing such barriers would improve welfare by 25 percent, and fully equalizing male and female labor force participation could increase GDP by some 60 percent. Gains of a similar magnitude would be achievable in other highly unequal countries such as Pakistan and India. Barriers to female participation encompass discrimination, differential investments in human capital, and deficient parental leave policies, to name a few. In 18 countries in this paper's sample, for example, husbands can legally prevent their wives from working. In 104 countries, laws remain on the

books that bar women from specific jobs, while 59 countries have no laws of any kind against sexual harassment at work.

Kumar et al.(2018)**,** *Absence of Sub-Targeting in Women-Specific Initiatives* A model that permits the identification of characteristics of individuals participating in different activities in the labor market is the logit model the efficacy of the SHG movement has been duly praised and its potential to further the cause of women empowerment consistently under scored. A study set in rural Bihar attempts to understand women's attitudinal change from before to after joining an SHG by capturing responses from women along five metrics - socio-economic up lift men, education and training, marketing and entrepreneurship qualities, technology adoption and participatory research and banking/ credit aspects (Meena and Singh 2013).

Mishra et al.(2018), the most women oriented or skill-building schemes have mobilization as a program component and yet little is known about their efficacy because 70% of working age youth is unaware of the skill development programs run by the government. An experiment (Ravallion et al 2013) that seeks to explain low uptake of Mahatma Gandhi National Rural Employment Guarantee Act in Bihar, despite the absence of alternative employment opportunities concludes that mobilization efforts, however thoughtful in their design, can often struggle to move their targets past "groupthink": where the program or scheme is perceived as effective as a community but not at an individual level.

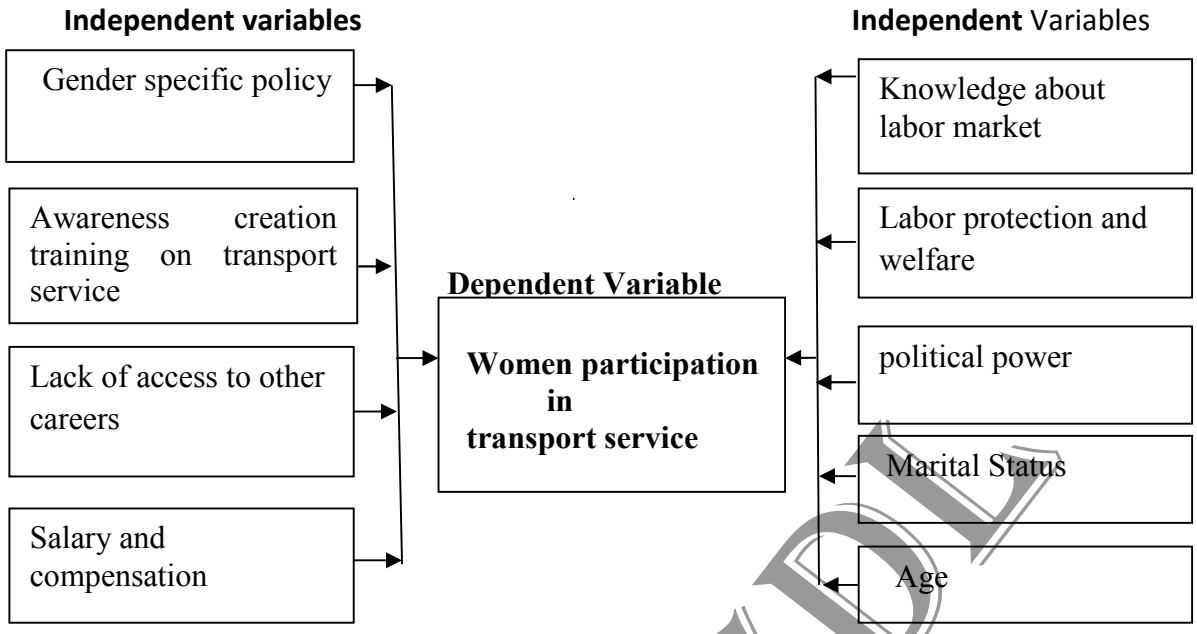
In a related study, Scholl et al. (2018) study the overall decision to participate in transport service for women influence of the BRT system in Lima, finding negative impacts on labor outcomes concentrated on individuals living close to the trunk line, and no impacts on individuals living in low income areas served. Gender segregation in the labor market has potentially large effects on economicgrowth through sub-optimal allocation of labor across the sectors of theeconomy. Although the gendered nature of occupational choice affects both men and women, labor force surveys inAfrica consistently find that it is women who are concentrated in low-wage, low productivity industries,whether in self-employment or in wage employment.

Daniel M. et al.,(2018) the descriptive analysis presents in panel A the summary statistics of the different outcomes of interest for control and treatment groups by gender in the period prior to the BRT and Line 1 opening (2007-2009) and in the post-intervention period (2010-2017). There

are large gender differences in employment rates between men (80%) and women (60%). There is a predominance of self-employment over paid employment (employee); women are more likely to be homemakers and have lower quality jobs (according to our job quality index19) and be employed in occupations classified as in the bottom 25% of the ENAHO sample earnings distribution. These gender differences are also evident for earnings, hours worked and their ratio. A large proportion of the sample reports spending on public transport, however men tend to spend more than women. In terms of education, the average number of years of education is 11.8 for men and 11.1 for women. The latter is also reflected in the lower proportion of women with an education level of high school or higher. This is done for the full sample and for the sample after imposing overlap (satisfying common support). Differences between treated and controls within gender groups and which are statistically significant at the 5% significance level are highlighted in bold.

2.3 Conceptual framework

The conceptual frameworks for the study has taken women's participate in services transportation as dependent variable and, age of the employment, marital status of the employment, gender-specific policies, awareness creation training on transport services, lack of access to other careers, salary and compensation, political power, knowledge about labor market and labor protection and welfare, as an independent variable which if not managed and implemented properly leads to women's decision to participate in transport services. The above mentioned independent variables negatively impact women's decision to participate in transport services, the dependent variable. They can be seen as avoidable variables. Addressing these issues could also be considered as addressing the effects of women's labor force participation performance.



summary

Ethiopia women have played a traditional role of motherhood and home maker in both rural and urban areas. Women usually have limited accesses to resources and opportunities and their labor force participation remains low relative to their potential particularly for participation in transport service. The recognition of the role of women in social and economic activities has been the objective of protecting and empowering women as workers, and better environmental workplace for decision to participation in transport service. To prevent unfair employment practices and exploitation of women in the labor market, and to safeguard and wellbeing of the woman, it is essential to provide material protection to working women. Limited access to safe transportation is one of the greatest challenges to labor force participation faced by women in developing countries. This paper quantifies the causal impacts of improved urban transport systems in women employment outcomes also resulting from unequal career prospects; another driver for the wage and skill gap, legal labor protection and welfare and lack of awareness creation are the fact that often women are employed in different positions. To, identifying of influential factors in the smooth functioning of the system is essential to design purposeful intervention planning for betterment of women's employment in particular and the society at large. At last, to the best knowledge of the researcher there is no study that have been conducted on this title so far in Ethiopia in general and in study area in particular.

CHAPTER THREE

3. METHODOLOGY OF THE STUDY

3.1.Descriptions of the Study Area

Guraghe Zone is one of among the 17 administrative zones of SNNP regional State. It zone is located at about 158km from capital city Addis Ababa within the south western region. The capital city of the zone is Wolkite, while the entire zone has a total area of 590,419 hectare of land. From which 213,593 hr, 192,937.9 hr, 44985.9hr, 62,292.68 hr and 76,609.52 hr are covered by annual crop production, perennial crop production, grazing lands, both natural and manmade forests and others respectively (GZAD report, 2019). The entire Guraghe Zone has an estimated population of 1,828,424 of which male 48.53% (887,370) and 51.47% (941,054) female both in urban and rural part (GZFEDD, 2019). There have 16 districts and 5 Town Administrations in Guraghe zone.

It zone includes all agro-ecological zones altitude ranges from 1001m to 3450m above sea level. From this altitude range of variation the woredas classified under three climatic zones namely which accounts, high land (Dega'), Mid altitude , (Woyina-Dega') and lowland (kola) of the areas and two (Bimodal) rainy seasons namely; Keremt where the main wet season is from June to September and Belg the small wet season extends from February to March. The rainfall distribution of the study area is characterized by heavy and erratic in nature. The soil types of the area is for black soil , red soil, clay loam and sandy soil type respectively. As result of having to increase the number of women decision to participate in transport sector offers many job opportunities to which women must have access.

3.2. Sources and types of data

The primary data includes: The primary data source was the collected from employees participated of the transport service and additionally, educational and women & children affairs sectors were key information closed to this service sector. Data types both qualitative and quantitative data will be used in the process of investigation.

3.3.Sampling Size and Sampling Technique

An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility (Kothari, 2004).

Multi-stage random sampling from probability sampling techniques methods were used to select representative employees in the study area. At first stage, these have randomly selected two out of 16 woredas and one out of five town administrations in Guraghe zone. They are Enemorna Ener woreda, Kebena woreda and Wolkite town administration were randomly selected. According to the sectors of these randomly selected woredas human resource management, the total number of employees working in the organization is 1350. The target population was a total of 1350 employees working at education, transport services and women and children affair sectors purposive random selected. At the second stage, stratified sampling technique was employed. Then, these employees were stratified into three stratums depending on types of services they deliver and behavior of activities being done (three stratums with employees working in education sector, transport services sector and women and children affair sector). At the last stage, simple random sampling technique was used so as to avoid sample section bias.

To determine the appropriate sample size out of total population, the researcher used Yamane (1967), provides a simplified formula to Calculate sample sizes assumed for different level of precision or 3% to 10% at a 95% confidence level for Equations. Accordingly, 309 respondents were selected from each stratum by using simple random sampling technique.

Based on targeted total population of 1350, formula for sample size was developed as: $n = \frac{N}{1 + N(e)^2} =$, at 5% precision level with 95 % confidence level. As a result, it follows...

Therefore $n = \frac{1350}{1+1350(0.05)^2} = 308.5714 \cong 309$

Where
N=population size
n= sample size
Thus, N= 1350
e = designates maximum variability or margin of error 5% (0.05).
Determine the proportion of each stratum in the study population

$$p = \frac{\text{No. of elements in each stratum}}{\text{total number of household size}}$$

Determine the number of elements that was selected from each stratum = **(n) x (p)**

Select the required number of elements from each stratum with by using simple random sampling technique.

Women and Children affair = (7) x (3) = 21

Education sector = (17) x (3) = 51

Transport service sector = (79) x (3)= 237

Table 3.1:Targeted total population and the Sample Size taken

Population category	Frequency	Sample Percentage	Sample Size
Women and children affair	96	23	21
Education sector	225	23	51
Transportation service	1029	23	237
Total	1350	23	309

Source: Own design (2020)

3.4. Data collection Instruments

Different tools or techniques of data collection methods were employed to collect data from the sources. Accordingly, structured questionnaire was targeted for collecting quantitative data from sampled respondents, unstructured interviews, Likert's scale, case studies and document analysis was targeted for collecting qualitative data from key information so as to attain dual objective that is, minimizing the limitations of questionnaire methods and to obtain supplementary information through cleared stated check list.

The completed questionnaires have provided useful information in such a way that the respondents may reveal their attitudes on issues relating to factor affecting women decision to participate in transport services that was used to understand them then, all the data were collected and identified the causes that contribute to the causes factors.

The questionnaire was pre-tested on selected respondents for consistence, clarity and to checking of the vagueness of terms used. And on the basis of the results of the pre-test necessary modifications or adjustments was made to make it clear and meaningful before the execution of the survey.

Moreover, so as to obtain reliable data from the sample respondents, the purpose of the study is being explained to the respondents prior to the actual interview has conducted. Women decision to participate in education sector, transport services sector and women and children affair sector were assigned and they have capable of speaking, reading and writing in local language. Training is being given to data enumerators concerning how to conduct proper interview questioning, data recording and deep explanations about each questionnaires subject matter to create clear idea about the interview questionnaire. Furthermore, when the data collection was started the researcher was proper follow-up, observations and cross check back association by cart with data enumerators to end with reliable data. Data collection was carried out beginning from February to the end of March, 2020 and finally, conclusions and recommendations were forwarded.

3.5. Methods of Data Analysis and Interpretation

Soon after key informants' interview and the researcher was summarized and coded the data manually. Besides, data collected through questionnaire was edited manually at home and entered in toSPSS-20and STATAsoft ware version 14.

Descriptive statistics and econometric analysis methods of data analysis were used. Descriptive statistics like mean, standard deviation, percentage and frequency and interpreting the results based on the sample data collected were used to describe socio-economic. Factors affecting women decision to participate in transport services was analyzed by probit model.

3.6. The Likert Scale Analysis

One popular technique to obtain information on human knowledge, perception, behavioral preferences, and similarities or the lack of them is the inclusion of likert-type (for example, 1= strongly disagree, 5= strongly agree) or dichotomous (such as, yes/no) scales in survey questionnaires. Several respondents' characteristics will be measured using the likert scales. Five choices, ranging from 'extremely agree or extremely important to extremely disagree or extremely unimportant are scored "1" (extremely disagree or extremely unimportant) to "5" (extremely agree or extremely important). The higher the number, the stronger the agreement or importance of an attribute or belief is. Frequency tallies are scored for each attribute or belief to give some indication of its intensity. Results using the likert scale measure was presented respondents an employee's in transport service sectors, several other respondents'

characteristics, beliefs in like traffic police and drivers for principles and objectives. The likert scale measures the average intensity of beliefs and attitudes and represents the average degree of belief respondents hold.

3.7. Econometric Model Specification

Goodness-of-Fit Test

The goodness-of-fit of the models were assessed using pseudo R-squared and probability of model joint significance value for probit model and probability of joint significance and adjusted R-squared values for OLS model (Madala et al.,1983). Pseudo R-squared is calculated and the obtained values indicated that the independent variables included in the regression explain significant proportion of the variations in the red bean farmers" likelihood to participate in the market.

Multi co linearity and hetroschedasitcity test

It is important to check normality, model specification and multicollinearity and hetroschedasitcity problems before running the model. Multicollinearity problem arises due to a linear relationship among explanatory variables; and becomes difficult to identify the separate effect of independent variables on the dependent variable because there exists strong relationship among them (Gujarati, 2005). Also it technique was employed to detect multicollinearity in continuous explanatory variables. In order to check existence of heteroscedasticity problem in the data set, the parameter estimates of the coefficients of the independent variables cannot be BLUE. Therefore, Breusch-Pagan test of heteroscedasticity which does not require ordering of observations but requires the assumption of normality was employed for detecting heteroscedasticity in this study.

Probit Model

A women's decision to participate in transport service is influenced by many socioeconomic, institutional and female specific characteristics. The probit model was used to analyze those factors influencing labor force participation of women transport service. The decision to participate in the market is discrete and it takes a value of 1 if a women's decision to

participate in transport service and 0 otherwise. Drawing from Von Braun and Immink (1994) ; Goletti (2005); Ohen *et al*. (2013) the explicit form of the probit model is expressed as:

$WDPT = \beta_o + \beta_1 x_{i.....}\beta_n x_n + u_i.$ Where n=1, 2, 3….

Following,

$WPT_i = \beta_o + \beta_1 Age + \beta_2 MRS + \beta_3 GSP + \beta_4 AWOTS + \beta_5 LAOC + \beta_6 SAC + \beta_7 PP + \beta_8 KLM + \beta_9 LPW + U_i$

$$WPTi = \begin{cases} 1 \\ 0 \end{cases}$$

1, if Women's participate in services transportation

0, Otherwise

Where,

Age= Age of the employments

MRS= Marital status of the employments

GSP= Gender-specific policies

AWOTS= Awareness creation training on transport services

LAOC= Lack of access to other careers

SAC= Salary and compensation

PP= political power

KLM= Knowledge about labor market

LPW= Labor protection and welfare

Ui= Error term

3.8. Definitions of Variables and their Expected Sign

Dependent variable:

Women's participate in transportation services (wdpts): It is a dummy variable that takes value 1 if women participate in transportation services, O otherwise (education and women and children affair sectors). It is based on the theories of definition of female decision which consists of everyone who was used as one tool in identifying to participation of strengths or weakness in involved in the transport services. This is particularly important for women in the Ethiopian because many women decision to participate in transportation services is too low at (e.g. pilots, drivers, assistants, inspectors, and conductors), and non-mobile transport services occupations

(e.g. mechanics, engineers, and managerial positions including middle management positions). This, in turn, reinforces the lack of attraction of transport service sector jobs to women(Assad and Krafft, 2013).

Independent variables:

Based on theories of women decision to participate and previous studies, 9 explanatory variables were identified and included in the model. The variables include age, marital status, lack of access to other careers, salary and compensation, lack of political power, knowledge about labor market, gender-specific policies, labor protection and welfare and so on.

Age (AGE):It is a continuous variable, defined as the employments age at the time of the study measured in years. Rehman *et al.* (2010) found that age has positive relationship with household savings. Different previous researches results how as the age of the women increases, their participate in transport services decreases. Thus, this study expected a negative sign.

Marital status of the household head (MRS): This refers to Women's marital status with reference to being single, is she married, divorced or widowed. Each category is considered a dummy variable on its own, and then if the they engaged in married it takes value 1; O otherwise. If women engaged in married their responsibility rises and then participating in stuff sectors will decreases. Hence, it is expected negative sign.

Gender-specific policies (GSP): Development policy and programming can increase the enablers of and reduce barriers to WEE. It is important to distinguish between broad-based policies not specifically targeted towards women but which can impact WEE and gender-specific policies. Women around the world report that care responsibilities keep them from joining the decision to participate and being more in transport service sector workers, and evidence shows that the availability of low-cost child care promotes labor force participation among women (Angeles et al. 2014). In the study the value measured in likert scale it had negative effect.

Awareness creation training on transport services (AWOTS): This refers to the involvement of the employments on awareness creation and short-term teachings on transport services profession. It is a variable that takes the value measured likert scale if the youth participated on such trainings it had positive effect. Currently, government and non-government organizations

are promoting women participate in transport services through such trainings. Hence, the participation of the females on trainings is expected to positively affect from this point of view. According to Girma*et al.* (2013), the participation of women on trainings positively affects their transport services profession. Thus, we expected that a positive sign.

Lack of access to other careers (LAOC): It variable refer to factor that affecting of women decision to participate in transport services, obstacles in career development can appear at any time during an employee's employment period which serves as stressor for them. This value measured in terms of identifying to participation of strengths or weakness in the transport services. Larson (2004) says career evolution creates stress on employee's understandings of the value of his or her career prospects within the category of mobile transport services occupations. This study expected positive sign.

Salary and compensation (SAC): The variable influence in the participation of female employees, when a worker is engaged in a low-wage position with restricted benefits, it had positive effect, there is little encouragement to stay if a comparable employer offers even a considerably higher rate of pay. "While lower paying job roles involvement a general high average of employee uninterested. In line with salary and benefit packages, assistance or voluntary benefits provided by the organizations encourage employees to stay in the company (Rion,2009). Organizations also used such assistance for creating good relationship in the organization with employees(Shukla & Sinha, 2013).This study expected positive sign.

Political power(pp): This represents the political power and Policy-makers, economists and development practitioners all agreed that special economic zones would create decision to participate in transport services an employment opportunities for women. And finally 'gender-intensified' barriers that affect both sexes but bear down most on women's the primary responsibility for childcare and other household activities they are more severely affected. These stressors can contain an array of problems like being trapped at a position, deprived of any expectations of improvement or pressures of downsizing. In the study the value measured in likert scale, and it expected negative sign.

Knowledge about labor market (KLM): Women decision to participate in transport service sector concerns were raised over the low level of technical knowledge of female workers, and

also the limited participation of women in vocational training, it had negative effect. Experts pointed out a number of reasons for the low level of skills of female workers and highlighted the mismatch of skills and academic attainment, further aggravated by lack of relevant training, that takes the value measured likert scale as the primary reason for the position of women on the occupational ladder, and it expected a negative sign.

Labor protection and welfare(LPW): It refers all employees, regardless of gender, receive equal treatment. Any form of discrimination is prohibited. To create and maintain a work environment that encourages respect for the dignity of each person, procedures will be established through RATB Internal Regulation foramicable settlement of individual complaints lodged by employees, Concerns were raised regarding the safety and security of female workers, including those relating to violence or sexualharassment, in addition to those prescribed by law, Berliner Verkehrsbetriebe (BVG,2016). In the study the value measured in likert scale,it had negative effect.

Table 3.1: Explanatory variables and direction of influence on dependent variables

S.N	Explanatory variable	Expected sign	Remark
1	Age of female	Negative	Continuous
2	Marital status (Dummy)	Negative	Married 1, single 0
3	Gender-specific policies	Positive	likert scale
4	Awareness creation training on transport services	Positive	likert scale
5	Lack of access to other careers	Negative	likert scale
6	Salary and compensation	Positive	likert scale
7	Political power	Negative	likert scale
8	Knowledge about labor market	Negative	likert scale
	Labor protection and welfare	Negative	likert scale

CHAPTER FOUR

4.RESULTS AND DISCUSSION

4.1 Descriptive Analysis

4.1.1 Demographic characteristics of the respondents

The demographic characteristics part of the questionnaire includes the personal futures like Gender, Marital status, Age, and Educational qualifications. The detail are as follows;

As can be observed, in table 4.1, the respondents were made up of 44 % male and 56 % female which represents almost male less than female. The women respondent was involved in the study in order to seek their views on male participation in the transport service.

The study revealed that (76.4%) respondents were still married, while 21% were not married and also 2.6% were divorced. This shows that the respondents had a chance to express what affects women decision to participation in transport service since they have substantial experience in socio-cultural practices associated with those who are married. The majority of men and women were married and a small number of respondents widowed. Marriage is deeply rooted in the Ethiopian culture and Ethiopian married women are usually considered to be fully responsible for household activities.

The findings presented in table show that, 40.5% of the respondents were 20 - 29 years old, 49.2% were of age 30 - 39 years and 10.3% were 40 - 49 years. On average the majority of the respondents were below 40 years of age. The respondents were old enough to have participated in transport service and also, they were aware of the factors which hinder their participation.

The study findings on highest level of education attained by category presented in table shows that 85.8% of respondents participating in the study had attained college and university degree & above level as their highest level of education while 14.2% had attained only the secondary education and completed as their high school education level. The respondents had the highest level education which enabled them to answer the questions without any hindrance; also the respondents who were involved in transport service can participate in the effectively since they

can translate the knowledge taught in class to practicability and this one can conclude that majority of the employees are within the younger age group.

Table 4.1: Frequency and Percent of marital status, age & level of education of the respondents

Demographic		Frequency	Percent	Cumulative Percent	Bias	Std. Error	95% C I	
							Lower	Upper
Sex	Male	136	44.0	44.0	.1	2.9	38.5	49.8
	Female	173	56.0	100.0	-.1	2.9	50.2	61.5
	Total	309	100.0		.0	.0	100.0	100.0
Marital status	Married	236	76.4	76.4	.1	2.4	71.5	80.9
	Unmarried	65	21.0	97.4	-.1	2.3	16.5	25.2
	Divorced	8	2.6	100.0	.0	.9	1.0	4.5
	Total	309	100.0		.0	.0	100.0	100.0
Age	20-29	125	40.5	40.5	.0	2.8	35.3	45.6
	30-39	152	49.2	89.6	.1	2.9	43.7	54.7
	40-49	32	10.4	100.0	-.1	1.8	6.8	13.6
	Total	309	100.0		.0	.0	100.0	100.0
Level of education	9-12	22	7.1	7.1	-.1	1.5	4.2	10.0
	10/12 comp	22	7.1	14.2	.0	1.4	4.5	10.0
	Certificate	32	10.4	24.6	.0	1.7	7.1	13.9
	Diploma	96	31.1	55.7	.1	2.6	26.2	36.2
	Degree	132	42.7	98.4	.0	2.8	37.5	48.2
	Master	5	1.6	100.0	.0	.7	.3	3.2
	Total	309	100.0		.0	.0	100.0	100.0

Source: Own computation (2020)

Results for the proposed independent variables, the result was narrated as follows. As it is shown in the table 4.2, the mean, standard deviation & standard error score of the first independent variable (Gender specific policies) for 309 respondents showed that it 3.8594, 0.77116 & .01693 respectively with variance value of 0.595.

Awareness creation training on transport service measures whether the variable can affect women decision to participates in transport service sector or not. Thus, the mean value of the variable is 4.0922, whereas the variance & standard error score values are .419 and .0369 respectively. The standard deviation from the mean is 0.64708.

Lack of access to other careers are the third independent variable. Therefore, the mean value of the variable is 3.9608. Additionally, variance & standard error score values are 0.439 and 0.0379 respectively. The table also showed that the value of the standard deviation is .66238.

Salary and compensation is the fourth proposed independent variable. The mean value is 4.0336 with variance & standard error score values of .413 and .0368 respectively. That is the value of the standard deviation 0.64248.

The mean value of Political power (the fifth proposed independent variable) showed 3.8236 with the standard deviation, variance and standard error values of 0.93198, 0.869 and 0.0541 respectively. Knowledge about labor market (the sixth proposed independent variable) showed the mean value of 3.9584 with the standard deviation, variance and standard error values of 0.60477, 0.366 and 0.0355 respectively. Finally, analysis result for the seventh independent variable (Labor protection and welfare) was presented. Thus, the mean of was 3.9293 with the standard deviation of 0.95382. The variance value of the variable was .910 and the standard error value was 0.0548.

The major reasons for growing women's decision to participate in transport service. are home consumption and sale. AWOTS and SAC are used for labor force participation. In terms of land utilization, Table 4.2 shows that, on average, 4.0922 & 4.0336 labor force of women to participate in transport service is allocated to awareness training and salary & compensation as compared to 3.9608 and 3.9584 for LAOC and KLM, respectively. women employees about transport service sector was presented as quite low.

Table 4.2: Descriptive Statistics of dependent and independent variables

Variables		Statistic	Std. Error	Bias	Lower	Upper
WDPTS	N	309		0	309	309
	Mean	1.2039	.02296	.0000	1.1586	1.2491
	Std. Deviation	.40354		-.00097	.36587	.43320
	Variance	.163		.000	.134	.188
GSP	Mean	3.8594	.04387	-.0029	3.7667	3.9432
	Std. Deviation	.77116		.00015	.69355	.84199
	Variance	.595		.002	.481	.709
AWOTS	Mean	4.0922	.03681	-.0034	4.0158	4.1630
	Std. Deviation	.64708		.00011	.59074	.70129
	Variance	.419		.001	.349	.492
LAOC	Mean	3.9608	.03768	-.0016	3.8791	4.0275
	Std. Deviation	.66238		.00057	.60626	.72456
	Variance	.439		.002	.368	.525
SAC	Mean	4.0336	.03655	-.0027	3.9596	4.1007
	Std. Deviation	.64248		.00048	.56119	.72634
	Variance	.413		.002	.315	.528
PO.PA	Mean	3.8236	.05302	-.0040	3.7039	3.9186
	Std. Deviation	.93198		-.00107	.80163	1.05893
	Variance	.869		.002	.643	1.121
KLM	Mean	3.9584	.03440	-.0028	3.8840	4.0226
	Std. Deviation	.60477		-.00056	.54631	.65981
	Variance	.366		.000	.298	.435
LPW	Mean	3.9293	.05426	-.0051	3.8145	4.0318
	Std. Deviation	.95382		-.00034	.84551	1.06004
	Variance	.910		.002	.715	1.124

Source: *Own computation (2020)*

4.1.2. Women's perceptions and feelings towards participating in transport services

To assess level of women perception towards transport sector service provision, a simple questionnaire with some specific question was developed and data was collected from eighty female respondents. These eighty women respondents were selected out of 309 sample size to collect this additional data (in addition to use of these respondents for main data collection purpose) for descriptive analysis so that it could be possible to investigate what their perception seems about transport sector service provision process. As a result, the researcher presented descriptive analysis result of collected data as follows.

Table 4.3: Descriptive statistics about women perception towards transport sector

Different	Items	Frequency	Percent
What is your Perception towards participation intransport service?	Very low	8	10
	Low	12	15
	Moderate	12	15
	High	18	22.5
	Very high	30	37.5
Choice of job description in transport service	Driving	39	65
	Traffic police	16	26.67
	Maintainance	5	8.33
Is there any constraints/problem against your decision?	Yes	51	85
	No	9	15
What are Types of problem/constraints you face?	Lack of professional training	31	51.67
	Lack of money	9	15
	Lack of social awareness	5	8.33
	sexual harassment	15	25

Source: Own Computation (2020)

As it is shown in the above table 4.3, Perceptions and feelings of women employees about transport service sector was presented as the first core question and it was raised to respondents to assess the extent of their feeling about the sector. As analysis result assured, 8(10%), 12(15%), 12(15%), 18(22.5%) and 30(37.5%) of the respondents responded that their perception about transport service sector is very low, low, moderate, high and very high respectively. Here, the result showed that 30(37.5%) of them responded that their perception about the sector is very high.

Taking in account of those who responded as moderate, high and very high, interest of respondents was also assessed to identify in what type of specific job they need to participate. Thus, the result showed from the analysis as 39(65%), 16(26.67%) and 5(8.33%) of the respondents responded that they want to participate as driver, traffic police and maintenance service technician respectively. The result showed here that majority39(65%) of them have good interest to be driver and the smallest 5(8.33%) of them have interest to be technician.

To identify whether there are different constraints that affect the respondents not to take part in the sector, they were asked to provide their opinion. As it is seen from the analysis result,

51(85%) of the respondents responded that there are different problems that are seriously affecting their participation. As the analysis result of the data revealed, 31(51.67%), 9(15%), 5(8.33%) and 15(25%) of them answered respectively that lack of professional training, lack of money, lack of social awareness and sexual harassment are some of the main problems that have been limiting their participation not to take part in the sector as per their interest. The analysis showed also that lack of professional training is the main problem that affects participation of women not to participate in the sector.

4.2 Econometrics Analysis

Women's decision to participate in transport service is influenced by many socio economic, institutional and women specific characteristics. The probit model was used to analyze those factors influencing decision to participation of women in transport services.

In descriptive part**,** the researcher has dealt mainly with explanatory variables to identify factors affecting women labor force participation in transportation services and the perception of the respondents towards participation in transportation services.

In addition to descriptive analysis, the probit regression model was employed to identify the determinants of women's decision to participate in transport service. Before estimation was done, data exploration is an important step. To start with checking whether multi co-linearity is present or not, a simple correlation coefficient matrix was conveyed. Gujarati (2005) establishes a rule of thumb which says that multi co-linearity is a serious problem when the correlation coefficient is 0.8 or above. Thus, though correlation coefficient is present, multi co-linearity is not a serious problem in our data. To test the significance of the probit model; the log-likelihood ratio test, the pseudo-R2 are used. These results showed that the models are statistically acceptable as 14.59% of the variation is explained in the probit model (table-4.4). This number seems to be very small; this is due to the fact that the dependent variable is dummy and except age all independent variables are Likert scale type measured variables. The two tests used to confirm the validity of the estimation were LR test and Wald test. For the likelihood ratio test, the calculated LR chi2 (9) is 47.52 and Wald chi2 (9) = 44.33 and the critical value of the test (19) at one percent significance level is 16.9190. The chi-square test shows that the model is significant at 1 percent level of significance showing that the overall model is a good fit and p-

value is significant at one percent significance level. Therefore, the likelihood ratio test of goodness of fit under the null hypothesis that all parameters are zero was rejected. Hence, our data fits the probit model very well (Appendix III).

In most econometric data particularly in cross-sectional data, it is more likely to encounter heteroscedasticity problem. Since our data is cross sectional by its nature, we are likely to encounter with the problem of heteroscedasticity. This test showed that the null hypothesis of homoscedasticity is rejected; that is heteroscedasticity problem is detected. Because of this we cannot use a simple probit model for this study rather we use heteroscedasticitic. To correct the problem, robust standard errors was estimated. The coefficients of the probit model only give the significance and the direction of the effects of each explanatory variable on daily laborers saving behavior. The probit indicates that probability that respondents accept or reject the offered hypothesis due to a unit change in continuous explanatory variables and a change of dummy variables from 0 to 1, for discrete variables (Greene, 2003). Both the coefficient and marginal effects of the probit of the general model with all covariates are presented in below table (tables 4.4).

4.3 Results for Probit Model

Table 4.4: Probit Regression Result

Variable	Coef.	Robust Std. Err.	Z	P- value	Marginal effects dy/dx
AWOTS	.3859783	.1414683	2.73	0.006***	.0985508
LAOC	-1.028401	.2283736	-4.50	0.000***	-.2625786
GSP	.0608713	.1002825	0.61	0.544	.0155421
LPW	-.1856867	.0922363	-2.01	0.044**	-.0474109
MRTS	-.4809972	.2172444	-2.21	0.027**	-.1082137
AGE	-.010825	.0077925	-1.39	0.165	-.0027639
PP	-.1626197	.1518093	-1.07	0.284	-.0415212
SAC	.5482079	.2055243	2.67	0.008***	.1399724
KLM	-.5966535	.1863942	-3.20	0.001***	-.1523419
_Cons	5.502998	1.074488	5.12	0.000	3.39704
Log pseudo likelihood= -139.07998					

Number of observations=309
Wald Chi2(9)=44.33; Prob>Chi2:0.0000
Pseudo R2=0.1459

Source: Own Computation (2020)

* is significant at 1% level of significance and **is significant at 5% level of significance

The above regression table showed that all the variables registered the expected signs and out of nine variables, six of them were identified to be statistically significant whereas 3 of them are not statistically significant. The regression result indicated above that gsp and sac are independent variables that have positive relationship with the dependent variable (probability of participating in transportation services, awots). However, variables like laoc, lpw, mrts and klm identified to have negative relationship with the dependent variable.

4.3.1 Determinants of women decision to participate in transport service

Awareness creation training (awots): This variable registered the expected positive sign and statistically significant at 1% level of significance. The marginal effect shows that being participated in awareness creation training on women's participation in labor force, increases the probability of women's participation in transportation service by 0.0985, on average. This indicates being taken the training increases the probability of participating in transportation service and also it is expected that a larger expectation of labor force participation.

Lack of access to other careers (laoc): This variable registered the expected negative sign and statistically significant result at 1% level of significance. Keeping other things constant, the marginal effects result showed that if being women agree with the lack of access in transportation for women, then it decreases the probability of participating in transportation services by 0.2626. In other words, as the number of access to other careers increases, the level of decision to participation in transport services increases. This could be as a result of more responsibilities to meet and more labor force market to service sectors there by balance of female participates in marketable surpluses for demands. This concurs with the findings of Onoja et al. (2012) who reported that women labor force significantly influenced extent of market participation in fish markets in Niger delta region.

Labor protection and welfare (lpw): This variable registered the expected negative sign and statistically significant at 5% level of significance. The marginal effects show that if being women believed that there is a weak or no labor protection and welfare in transportation sectors, decreases the probability of participating in transportation sectors by 0.047, citrus paribus. This is due to the fact that in Ethiopia transportation service is not suitable work place for women and even for educated male; as there is misconduct related activities are being practiced.

Marital Status of the respondent (mrst): This variable is a dummy variable that takes value of 1 if a woman is married, 0 otherwise. It registered the expected negative sign and statistically significant result at 5% level of significance. The marginal effects showed here that being married decreases the probability of getting participated in transportation service by 0.108, on average. This is due to the fact that women have many responsibilities at their home than male and they are unlikely to participate in field work and the like. This could be attributed to the fact that most of the time males are decision makers. Although gender gap in lower labor force participation has been closed, there is high number of unemployment's of women. This is largely linked to the cultural influence ideology, which associates women with their reproductive role.

Salary and compensation (sac): This variable registered the expected positive sign and statistically significant at 1% level of significance. The marginal effects show that if women believed that there is a high salary and compensation in the sector, the probability of in transportation sectors is increases by 0.1399, citrus paribus.

Knowledge about labor market (kalm): This variable registered the expected negative sign and statistically significant at 1% level of significance. The marginal effects show that if women have no or less information about labor market condition, the probability of in participation transportation sectors is decreased by 0.1523, keeping other constants.

CHAPTER FIVE

5.CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

The findings of the data therefore lead to the conclusion that the descriptive analysis suggest that the perceptions and feeling in the transport service sector was raised to respondents for research that may prove fruitful in producing many more useful insights about the reasons underlying low female labor force participation in transport service. Marriage is deeply rooted in the Ethiopian culture and Ethiopian married women are usually considered to be fully responsible for household activities and the husband is the one responsible to work away from home for wage. Consequently, policies targeting a lower marriage rate might not really succeed in such a country. However, two strategies might be used to enable and encourage married females to participate in the labor market. On the one hand, adjusting the working conditions to facilitate women's participation in the labor force such as; flexible working hours. Therefore, allowing women to participate in the labor market, while still having time to carryout household responsibilities(Sara Hassan *et al.*,2016). This shows that the respondents had a socio-cultural practices associated with those who are respondents.

To assess not only the description of the problem but also their perception about transport service provision process, the respondents were asked to provide their opinion. As analysis result assured, 8(10%), 12(15%), 12(15%), 18(22.5%) and 30(37.5%) of the respondents responded that their perception about transport service sector is very low, low, moderate, high and very high respectively. Moreover, 39(65%), 16(26.67%) and 5(8.33%) of the respondents responded that they want to participate as driver, traffic police and maintenance service technician respectively. The result showed here that majority (39/65%) of them have good interest or perception to be driver and only 5(8.33%) of them have interest to be technician.

As it is authenticated from output of descriptive analysis, 31(51.67%), 9(15%), 5(8.33%) and 15(25%) of the respondents answered respectively that lack of professional training, lack of money, lack of social awareness and sexual harassment are some of the main problems that have been limiting women participation not to take part in the sector as per their interest. Therefore,

employers need to be proactive in ensuring that discriminatory policies and practices are eliminated within their organizations, and that affirmative action is taken to create more job opportunities for women and to ensure that more women are recruited.

Awareness creation to training (awots) and Knowledge about labor market (kalm) for these both independent variables are tested by the research to investigate its impact on women decision to take part in transport service and the variable registered the expected positive sign and statistically significant result at 1% level of significance. This indicated that as women get more related trainings, the more will be their participation in transportation service. The marginal effects showed that if women believed that there is a high salary and compensation in the sector, the probability of participating in transportation sectors will increase by 0.1399, citrus paribus.

Knowledge about labor market (kalm) and Lack of access to other careers (laoc) is the second variable that registered the expected negative sign and statistically significant result at 1% level of significance. Keeping other things constant, the marginal effects result showed that if being women agree with the lack of access in transportation for women, then it decreases the probability of participating in transportation services by 0.2626. And also that if women have no or less information about labor market condition, the probability of participating in transportation sector will be decreased by 0.1523. In other words, as the number of access to other careers increases, the level of decision to participation in transport services increases. This concurs with the findings of Onoja et al. (2012) who reported that women labor force significantly influenced extent of market participation in fish markets in Niger delta region.

Unequal labor force participation between women and men is also a reality and it is more sharply observed in developing countries. While a myriad of socio-economic and overlapping factors affect the decision and ability of women to engage in the labor market including the level of economic development of cities, individual educational attainment, social dimensions (such as social norms influencing marriage, fertility, and women's role outside the household), and institutional settings (e.g. laws, protection, benefits) (Verick et al., 2014), access to transport srvice is increasingly emerging as a key issue affecting women's labor force participation.

This poses a barrier for transportation planners who cannot effectively target policies to reduce the mobility and accessibility gap between men and women. Moreover, women tend to be under represented in the transportation-related jobs, from decision-making and planning roles, to operators of public transportation (Duchéne, 2011; Kunieda and Gauthier, 2007; Peters et al., 2006) which many argue may contribute to and reinforce gender biases in transport systems. The policy also emphases that women be provided with opportunities for training and advancement, equal pay for work of equal value and be integrated into the mainstream of developments as well as increasing their participation rate in employment.

To meet future challenges, Ethiopia has to prepare its labor force participation to suit the needs of a knowledge-based economy. A number of programs in human resource development were initiated with emphasis on the inculcation of new skills. Training serves as one of the means of developing human resources. More effort needs to labor force participation in transport service gap between women and men. Taking in account of created for extensive engagement by the expansion of public transport service in Ethiopia, the government should give prior attention to consider women labor force participation in transport service. There is limited research exploring women's needs and issues concerning public transportation use in developing countries (Kash et al., 2014)**.**

5.2. Recommendations

Based on the above findings, the following recommendations were forwarded:

The results of the descriptive analysis of the perceptions and feeling in the transport service sector was raised to respondents and analysis result assured that they feel and perceive something about the sector and need to take part in service provision process. Thus, the channels of gender inequality are so complex that policy interventions must go beyond economics to effectively address them. Such a multidimensional approach to reducing gender inequality could unleash a nation's full potential for inclusive growth and development. A competitive process to identify and recognize equal opportunity employers or gender equal workplaces with appropriate national recognition and publicity could also serve as a means of raising awareness and encouraging compliance by employers.

Awareness creation training(awots) has a positive and significant effect on the probability of women decision to participate in transportation service. Hence, all the concerned bodies should give especial attention for successful implementation of awareness creation training program.

Salary and compensation (sac) showed as it has positive and significant effect on the probability of women decision to take part in transportation services. Thus, fair and attractive compensation for employees of all core sectors in general and transport sector in particular should get prior attention so that it could be possible to motivate and increase participation and productivity of all employees in general and women in particular.

Lack of access to other careers(laoc) has a negative and significant effect on the probability participation in transportation service. Hence, the extent to which women enter the labor force participation and the quality of the jobs they hold once their accessibility opportunities increase transport service is still an area that needs to be further examined. Increasing their labor force participation and to analyze policies to attract and motivate staff in the public transport and support the career development of women and change will be for the benefit of all.

Labor protection and welfare(lpw) has a negative and significant effect on the probability participation in transportation service. Hence, existing government direction to women decision to participation in the transport service system is proving to have an encouraging result by way of enhancing labor protection and the welfare outcomes of those women's actively participating in the labor market and well-being supports performance at the workplace.

Marital Status (mrst) has a negative and significant effect on the probability participation in transportation service. Hence, our trust to government policy to further enhance the identification of factors that affect women*'s* participation of strengths or powerful women labor force in involved in the transport services.

Knowledge about labor market(kalm) is one the important variables that affects the women's participation transportation service sectors. Thus the findings provide strong suggestive evidence that make it more convenient and safer for women to use transport service can generate labor force participation impacts. That to take action to increase women's ability to meet the

requirements of the labor force market after a long absence due to increased knowledge about women's needs professional and comprehensive approach.

All concerned government bodies, whether at local, federal or regional levels, should do what they can do in order to improve role, participation and productivity of women as they have the power and capacity to cover almost fifty percent of labor force requirement of the country in all sectors in general and transport service sector in particular.

The local government should give especial attention and create equal opportunity access to labor force participation as well as public transport services. Emphasize a number of constraints prevailing in the labor market of Ethiopia that have resulted in the stagnant position of women in low-skill and low-paid economic activities. Policies directly targeting these bottlenecks, including provision of better care services. The government should promote and communicate the role of gender in order to improve the perceptions of transport services to the gender issue and providing projects as a priority for women in rural and urban area. It is one of the most effective strategies for closing the gender gap, improving the added value of economic and contributing to sustainable development.

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Appendix-I: Questionnaires

Wolkite University

College of Business and Economics

Department of Economics

Dear Participant:

I am a student at wolkite University in the department of Economics. I am undertaking a research entitled as "Determinants of women decision to participate in transport service" a partial fulfillment of the requirement of the degree of master of science in economics.

The main objective of this questionnaire is to collect data which will be analyzed to identify the Determinants of women decision to participate in transport services in Guraghe zone. As a respond at be sure that the data what your provide will be kept confidential and it will be used only for academic purpose.

Thank you in advance for you cooperation!

Instruction: use the sign (√) to answer the question

SECTION -I: Background of the respondent

1. Sex A) male ☐ B) Female ☐
2. Age A) 20-30yrs ☐ B) 30-40 yrs ☐ C)40-50yrs ☐
   D) 50 and above ☐
3. Marital status A) married ☐ B) unmarried ☐
   C) Divorced ☐ D) Widowed ☐
4. Educational status A) educated ☐ B) illiterate ☐
5. If your answer is A for question number 5, what is the educational statue from below represented?
   A) Primary (1-8) ☐ E degree ☐
   B) Secondary (9-12) ☐ F master ☐
   C) Certificate ☐
   D) Diploma ☐

6. In which sector you have employed?

A) Transportation services sectors B) Education sectors C) Women and children affair

SECTION – II: Perception towards participation in transportation services

1.. What is your perception towards participation in transportation services?

A) Very Low B) Low C) Moderate D) High E) Very high

2*.. Do you want to participate in transport service?

1. Yes 0.No

3*.. If your answer question 2 is yes, in which job description do you want to participate in transport service ?

1. Driver 2. Traffic police 3. Mechanic

4*. If there is problem that obstacle to participate in transport service?

1. Yes 0.No

5*. If your answer question 4 is yes, in your opinion what are the problem that obstacle to participate in transport service?

1. Lack of professional training 2. Lack of money

3. Lack of social awareness 4. sexual harassment

6*. Women labor force participation in transport service is sufficient?

1. Yes 0.No

SECTION –III: Factors that influence women decision to participate in transport service-related Questionnaires Users Likert

Please indicate how you agree on the following factors that influence women decision to participate in transport service. The questionnaire is prepared in five points Likert-scale type. I

ask you to tick (√) or circle the appropriate scale (point) that indicates your opinion in table below. Scale values are 1= strongly disagree, 2 = Disagree, 3 = Neutral, 4=, Agree and 5= strongly agree

Determinants of women decision to participate in transport services being able to identify the variables include lack of access to other careers, salary and compensation, lack of political power, knowledge about labor market, gender-specific policies, labor protection and welfare and so on.		The scale of values				
No	Items	1	2	3	4	5
1.0	Gender-specific policies					
1.1	women participation in transport service activities are not supported by laws and regulations.					
1.2	Women participation in transport service not involves because the policy was unfair in general and treat employees unfairly					
1.3	Women have not a special gender policy, professional experience andmanagerial skills decision to participate in transport service.					
1.4	Lack of corporate policies for gender-balance recruitment or to facilitate women in the transportation of workplace.					
1.5	policy couldn't have an effect is that women face restrictions on their physical mobility outside the home.					
1.6	women have been largelyignored in the government's programs in the whole sector until recently					
1.7	Women's low participation results in a significant potential loss of productivity and also influence of GDP.					
1.8	Quotas do not existfor women decision to participate in transport service.					
1,9	Generally, lack of Promoting the women decision to participate in the transport services sector with in policy options					
2.0	Awareness creation training on transport services					
2.1	Lack of training opportunities for women in transport service to loss the relevant skills needed for the specific professions.					

2.2	The level of women awareness and interest on the topic of the selected transport sub-sectors may differ greatly.					
2.3	The society attitude is a major social obstacle for women skills needed for the specific professions and participation in the transport service.					
2.2	A high number of the society couldn't have economical support for women, there are factors affect the decision and ability of women to engage in the labor force market					
2.3	The opportunities being provided to women decision to participate is insufficient in most cities though it is at the worst stage in rural areas.					
2.4	Lack of strong social norm to prevent sexual harassment & it is even a common problem in rural and urban areas					
2.5	Unavoidable dominated of male in the societies, so that, its need to awareness creation.					
2.8	Social belief that females are less suitable to perform the tasks needed by the specific transport sector					
3.0	Lack of access to other careers					
3.1	Women commonly lack self-confidence in transport service due to negative attitude for the societies.					
3.2	They are not getting motivated so that they could develop their own self confidence					
3.3	Women commonly think that they could not carry burden of hard work					
3.4	Obstacles in career development can appear at any time during an employee's employment period which serves as stressor for them.					
3.5	The ground by itself makes them lack self-confidence participation in transport service activities					
3.6	Overall have economic wise compensation and benefit packages, there is feeling of unequally paid for women.					

3.7	women would look for other job opportunities if they will be go since no career advancement in this transport service sectors.					
3.8	potentially limit of women mobility and accessibility caused to loss economic opportunities.					
4.0	Salary and compensation					
4.1	There is dominance of male over female in the paid to salary					
4.2	Compared with the other sector labor market rate, the transport service sector has economic wise salary pay to employees.					
4.3	There is feeling of unequally paid while performing similar work for male and female.					
4.4	There is biased attitude about gender equality in rural & urban areas on economical benefiters.					
4.5	Women are getting discriminated in the not only salary, but also from all directions					
4.6	Cultural difference regarding the participation of women decision to the participations can have an influence.					
4.7	Women did not satisfied with the work environment in my current job so they would look for outside Opportunities					
4.8	The lower paying job roles involvement a general high average of employee uninterested.					
5.0	political power					
5.1	There is no created a common understanding among the society about women decision to participate in transport services					
5.2	The political power did not give enough recognition for male and female in case done work was not appreciated in general					
5.3	Women were not satisfied with the overall work environment because the political power would not suitable working condition on the particularly transport services.					
5.4	Women are less suitable to perform the tasks demanded by the specific transport service.					

5.5	Nothing is being done to raise women labor force participation in public transport service sector.					
5.6	political power does not solve through economic, social, and institutional constraints, that shape women's decision to participation are still very low.					
5.6	They should complain about the transport service by political power due to the decision to participation.					
6.0	Knowledge about labor market					
6.1	Women are less educated, hence, there is no a common understanding among themselves about their rights for decision to participate.					
6.2	Discourages especially newcomer employee groups (such as women) from pursuing transport professions.					
6.3	Women aren't supporting because they qualification and experience were not considered for promotion and the opportunity were not been equal to male employees					
6.4	The country as a whole inadequate in human capital formation, especially skills-based education for female, a lack of safety					
6.5	The lack of technical knowledge is that the women decision to participate in transport service sector is lower than male employees.					
6.6	A number of reasons for the low level of skills of female workers the mismatch of skills and academic attainment by lack of relevant training.					
6.7	The lack of importance of skills training programmers to decrease female employment					
7.0	Labor protection and welfare					
7.1	Women are more vulnerable to violence and harassment in public transportation because did not safe guard outside the home.					
7.2	They have so many of bottleneck on enhancing women's mobility and decision to participation in transport services					

7.3	Lack of strong social norm to prevent sexual harassment & it is even a common problem in rural and urban areas.					
7.4	There is no role clarity for protection and safety by the transport service sectors.					
7.5	There is not greater work-life balance and can offset work stress.					
7.6	There is not good promotion opportunity in working conditions are not substandard in the transport services.					

Appendix-II: Regression Results for Probit Model

i. Probit Regression Result

```
. probit wdpts awots laoc gsp lpw mrts age pp sac klm, robust

Iteration 0:   log pseudolikelihood = -162.83987
Iteration 1:   log pseudolikelihood = -140.24662
Iteration 2:   log pseudolikelihood = -139.08697
Iteration 3:   log pseudolikelihood = -139.07996
Iteration 4:   log pseudolikelihood = -139.07996

Probit regression                                 Number of obs   =        309
                                                  Wald chi2(9)    =      44.33
                                                  Prob > chi2     =     0.0000
Log pseudolikelihood = -139.07996                 Pseudo R2       =     0.1459
```

wdpts	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
awots	.3859783	.1414683	2.73	0.006	.1087056	.663251
laoc	-1.028401	.2283736	-4.50	0.000	-1.476005	-.5807966
gsp	.0608713	.1002825	0.61	0.544	-.1356788	.2574215
lpw	-.1856867	.0922363	-2.01	0.044	-.3664666	-.0049068
mrts	-.4809972	.2172444	-2.21	0.027	-.9067883	-.055206
age	-.010825	.0077925	-1.39	0.165	-.026098	.0044481
pp	-.1626197	.1518093	-1.07	0.284	-.4601605	.134921
sac	.5482079	.2055243	2.67	0.008	.1453877	.9510281
klm	-.5966535	.1863942	-3.20	0.001	-.9619794	-.2313277
_cons	5.502998	1.074488	5.12	0.000	3.39704	7.608957

Appendix III: Pearson Correlation Matrix

```
. corr wdpts awots laoc gsp lpw mrts age pp sac klm
(obs=309)
```

	wdpts	awots	laoc	gsp	lpw	mrts	age	pp	sac	klm
wdpts	1.0000									
awots	0.0155	1.0000								
laoc	-0.2115	0.5622	1.0000							
gsp	-0.0266	0.2983	0.2290	1.0000						
lpw	-0.0500	0.0434	-0.0780	0.3140	1.0000					
mrts	-0.0931	0.0570	0.0629	-0.0197	-0.0874	1.0000				
age	-0.0784	-0.0210	0.1123	-0.1063	-0.0763	-0.0130	1.0000			
pp	-0.0284	-0.1084	-0.1985	-0.0159	0.0402	-0.0072	-0.1277	1.0000		
sac	0.0290	-0.0714	-0.1002	0.0133	-0.0483	-0.0257	-0.0822	0.7651	1.0000	
klm	-0.1090	-0.0638	-0.0593	0.0083	-0.0741	-0.0155	-0.0533	0.6888	0.7584	1.0000

i. Marginal effects of the probit regression result

```
. mfx

Marginal effects after probit
      y  = Pr(wdpts) (predict)
         =  .82760532
```

variable	dy/dx	Std. Err.	z	P>|z|	[95% C.I.]		X
awots	.0985508	.03656	2.70	0.007	.026892	.170209	4.03047
laoc	-.2625786	.05311	-4.94	0.000	-.366671	-.158486	4.00809
gsp	.0155421	.02537	0.61	0.540	-.034173	.065257	3.82255
lpw	-.0474109	.02351	-2.02	0.044	-.093492	-.001329	3.91316
mrts*	-.1082137	.04265	-2.54	0.011	-.191797	-.02463	.763754
age	-.0027639	.00202	-1.37	0.172	-.006729	.001202	38.1715
pp	-.0415212	.03848	-1.08	0.281	-.116936	.033894	2.33118
sac	.1399724	.0518	2.70	0.007	.038455	.24149	2.43883
klm	-.1523419	.04655	-3.27	0.001	-.243578	-.061105	2.80798

(*) dy/dx is for discrete change of dummy variable from 0 to 1

Appendix-IV: Map of Guraghe zone