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| **Addis Ababa University**  **College of Law and Governance Studies**  **Center for Federalism and Governance Studies**  **Doctor of Philosophy in Federalism and Governance**  **Public Administration and Policy Design in Federations (FESD821)** |
| **Transport Tariff Hiking: The Case of Public Transport Fare between Addis Ababa and Woliso town** |
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# List of Acronyms

**AA Addis Ababa**

**ETB Ethiopian Birr**

**MoTL Ministry of Transport and Logistics**

**RSDP Road Sector Development Program**

**SPSS Statistical Packages for Social Science**

**UK United Kingdom**

**WFP World Food Program**

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# Abstract

*Public transport is one of the public utilities offered to the general public directly by the government or through private sector participation. In either scenario, public transport should be subject to comprehensive government control and stringent regulation in terms of pricing and service nature. The general argument is that the rates charged must be acceptable in the eyes of regulators, providers, and the general public. Based on a critical post-modern research methodology and a critical and descriptive research design, this research aimed to critically analysis the factors leading to the spiraling of public transportation rates between Addis Ababa and Woliso. Key informants and passengers were selected using purposeful and snowball sampling procedures. The research revealed that, despite the government's efforts to impose tariffs and offer subsidies to public transport providers, the government's policy involvement failed to control public transport price hikes. Some of the evident obstacles that public transport services encounter in the execution of government pricing policy includes a lack of institutional linkage and coordination between multiple sites of delivery and players. Public transport pricing policy continues to be one of the principal policy concerns and sources of controversy in the case study and Ethiopia generally. Since the fare or price charged to users has been more than government tariff, the government's public transport tariff has remained hypothetical. These suggests the existence of a critical contest between the government in charge of setting the tariff and overseeing its implementation and the public transport providers in the case study.*

*Keywords: transport tariff, public transport, Addis Ababa, Woliso, public utility*

# Chapter one: Introduction

## Background of the study

Transport, in general, is an essential component of countries or region’s overall economic growth and development. It also has a significant impact on the performance and competitiveness of sectors, enterprises, and businesses. One of the aspects that unites the whole economy and helps development and advancement is an efficient transport system. From a macroeconomic and policy standpoint, the transport sector is viewed as a catalyst for the markets and regions it serves, generating direct socioeconomic benefits and positive inter-sector multiplier as well as indirect spatial, agglomeration, and other spill-over effects. An effective transport infrastructure minimizes a country's logistics and trade costs while also promoting competitiveness, regional integration, and economic growth. However, inefficient transport infrastructure, high transport prices, and poor transport quality in emerging and low-income nations imposed undue expenses and delays on enterprises, businesses, and supply chains. The combination of high transport infrastructure and service costs and poor quality in developing and low-income economies (emerging nations) impedes people and commodity mobilization (World Food Program (WFP), 2022; Mohammed and Senadheera, 2022; Girma, 2023; Anjulo and Gebeyehu, 2019; Verma and Ramanayya, 2019; Agarwal, 2009; Weisbrod & Reno, 2009; Iles, 2005).

Public transport is one of public utilities that provide essential service to the public either through direct government provision or private sector participation but all service operates under government regulation. Because of its utility nature public transport operates under the government overall and strict regulation in terms of its price and nature of service they provide (Verma and Ramanayya, 2019). Public transport is one of the most important means of mobility of people from place to place for different social, political, political and personal purposes. Particularly, road transport is important for the easy mobility of people and improving economic functioning. Because of the importance of public transport as part of public utilities, it is argued that the prices charged must be seen as reasonable by regulators and the general public. However, price regulation by government should consider the existing conditions and maintenance costs of the service providers. Additionally, rate regulation needs the government to invest in public utilities (including public transport).

Moreover, public transport is considered as best modes of transport service particularly taking the environmental impacts of transport and existing infrastructural facilities in to account, it could be the most sustainable modes transport. Shared modes of transport among communities are more environmental-friendly and least cost alternatives. It is particularly significant in developing countries where majorities of the population extremely need accessible and affordable public transport service. Different scholars such as Mohammed and Senadheera (2022); Girma (2023), Verma and Ramanayya (2015) provide the significance of public transport both in developed and developing countries. Chocholac et al (2020) also argued that public transport service is the most eco-friendly and sustainable modes of transport. They put that “public transport services address sustainable challenges to integrating environmental “eco-efficiency” and social sustainability with the inclusion of all stakeholders to provide better service and ensure efficiency.” (p. 88).

Verma and Ramanayya (2015) argued that public transport systems are known to be sustainable modes in terms of space and energy efficiency, environmental and social benefits. A good networked public transport system with time-bound schedules, reliable services, comfort, competitive travel times, and affordable prices, are some of the required traits which also provides sustainable transport services and commuter satisfaction. Verma and Ramanayya also argued that improving the performance of public transport undertakings is becoming more and more critical due to the paucity of public funds, increased demand on transport services, and expanding social needs. Therefore, government intervention (either through regulation, subsidy mechanism, infrastructural development or direct delivery) to be vital in ensuring the sustainability of public transport (ibid).

However, public transport is continuously facing a number of challenges and problems, particularly in developing countries. The requirement of high costs for comprehensive public transport and the development of its infrastructure, the increasing costs of public transport agencies, and the broadening of policy goals and interventions resulted in financial shortages in the sectors, which led to a struggle for funds. Traditional methods of funding, such as public sector funding, subsidies, and revenue from fares, are not sufficient to make improvements to public transport infrastructure, and innovative funding mechanisms are, therefore, demanded. This problem is made more challenging because public transport is generally not a profitable investment for the private sector. Often, public transport systems use low fares as a means of promoting their use, which requires government subsidies (Verma and Ramanayya, 2015).

In Ethiopia, there is an ever-increasing price of fuel and spare parts, which has resulted in the skyrocketing of transport costs and fares. Given the upward revision of fuel prices in Ethiopia, in some instances no significant changes have been made to the fare of public transport. The government provides subsidy schemes for public transport to control the price of public transport. Given the upward revision of fuel prices, it is assumed that the fuel price for public transport has not changed as the government provides fuel subsidies (Addis Standard, 2023). For instance, according to the WFP (2022) and Ethiopian Monitor (2023), as of October 2022, the upward shift in fuel prices had no impact on public transport. At the same time, the prices of diesel and benzene have been revised upward to 59.9 birr per lit (from 49.02 birr per lit) and 57.05 birr per lit (from 48.83 birr per lit), an upward increase of 19 percent and 22 percent, respectively. However, public transport continued to buy benzene at 41.26 Birr per liter (15.79 Birr subsidy per liter) and diesel at 40.86 Birr per liter (19.04 Birr subsidy per liter), which is lower than the previous price of fuel. This means public transport vehicles will buy benzene and diesel at prices of 32 percent and 28 percent lower than the normal pumping prices, respectively. Accordingly, the public transport fare was assumed to remain unchanged by the public authorities. Fuel subsidies are primarily for public transport providers (Ethiopian Monitor, 2023).

Moreover, the government took further regulatory measures to ensure the affordability and accessibility of public transport services in Ethiopia. Despite the government's regulation of public transport (particularly through price regulation or setting tariffs), there are problems with the implementation of government regulatory mechanisms and policy interventions in public transport in Ethiopia in general and from Woliso to Addis Ababa (AA) and vice versa in particular. Therefore, this research aimed at a critical analysis of the causes and factors for the skyrocketing of public transport fares between AA city and Woliso town and vice versa based on critical postmodernism research philosophy.

## Statement of the problem

Despite the importance and key roles that public transport plays in people’s daily lives, it faces multiple challenges and problems in both developed and developing countries. Its requirements of a huge amount of investment for the development and improvement of infrastructure for public transport, less profitability of the sector, increasing public demands, limited carrying capacity of roads, and a lack of effective institutional linkage and coordination between different points of delivery (public transport stations, terminals, and centers) and actors (terminal workers, traffic police, drivers, and service users) are some of the visible challenges that public transport service faces. Normally, public transport service, which is provided by private sectors (commonly known as associations in Ethiopia), is critically susceptible to strong contestation and conflict of interest between users and providers, users and regulatory bodies, and providers and regulatory bodies.

Numerous scholars have significantly written about public transport, its significance, problems, quality, nature, typologies, and others. However, most of the literature on public transport invariably emphasizes and is limited to urban or city centers. A lot has been said about urban public transport, both at the international and country levels. For instance, Verma and Ramanayya (2015) have extensively written on public transport planning and management, with special reference to India and developing countries. Their major emphasis in this respect is urban and city-center public transport. Despite their claim to cover both urban and rural public transport, their book focuses more on urban public transport in India and other developing countries.

In Ethiopia, numerous scholarly articles (see table 1), papers, institutional reports, and briefings have been written on public transport. However, most of these works emphasize city public transport, particularly AA public transport. The literature on Ethiopian public transport ignores public transport starting from AA to other towns and vice versa and a long public transport service. Moreover, the existing literature in the country emphasizes choice of transport modes, infrastructure, the transport sector in general, and quality of transport while providing less emphasis on transport costs and price. Table one below shows some of the literature conducted on public transport in Ethiopia.

***Table 1: literatures on public transport in Ethiopia***

|  |  |  |
| --- | --- | --- |
| S. No. | Author/s and publication year | Title |
|  | Gebeyehu, M., & Takano, S. E. (2007). | Diagnostic evaluation of public transport mode choice in Addis Ababa. |
|  | Girma, M. (2023). | Operational performance analysis of public bus transport services in Addis Ababa, Ethiopia. |
|  | Abreha, D. A. (2007) | Analyzing public transport performance using efficiency measures and spatial analysis: The case of Addis Ababa, Ethiopia |
|  | Aklilu, T. (2006). | The Role of The Transport Sector in Ethiopia’s Economic Development |
|  | Mohammed, M., & Senadheera, S. (2022). | Public transport affordability evaluation for Addis Ababa |
|  | Gidebo, F. A., & Szpytko, J. (2019). | Reliability assessment of the transport system, Addis Ababa case study |
|  | Meron, K. (2007) | Public transport system and its impact on urban mobility: The case of Addis Ababa |
|  | Bogale, Y. A. (2012). | Evaluating transport network structure: Case study in Addis Ababa, Ethiopia |
|  | Zewdu, D. (2014). | Assessment Of Public Transport Service in The Case of Cross Country Buses |
|  | Kebebew, B., & Quezon, E. T. (2022). | Comparative Analysis on Road Users’ Cost Using HDM-4 Software and Manual Technique A Case of Addis Ababa-Adama Expressway |
|  | Kassa, F. (2014). | Informal transport and its effects in the developing world - a case study of Addis Ababa, Ethiopia |
|  | Kebede, L., Tulu, G. S., & Lisinge, R. T. (2022). | Diesel-fueled public transport vehicles and air pollution in Addis Ababa, Ethiopia: Effects of vehicle size, age and kilometers travelled. Atmospheric Environment: X, 13, 100144. |
|  | Eshete, M. (2015). | Public Transport System: The Case of Addis Ababa. *Addis Ababa: School of Graduate Studies, College of Social Science, AAUniversity*. |

Source: Compiled by the author (2023)

As indicated in the above table, there is an acute shortage of literature on the hiking of public transport tariffs in general and between two towns in Ethiopia. Most literature emphasizes urban public transport with specific issues such as mode of transport (Gebeyehu & Takano, 2007), the public transport system (Eshete, 2015) and its impact on urban mobility (Meron, 2007), the transport sector as a whole and its impact on the economy (Aklilu, 2006), affordability and reliability, and performance (Mohammed & Senadheera, 2022; Girma, 2023; Gidebo & Szpytko, 2019). This indicates that there is an acute shortage of research on the problems of public transport in general outside the capital city and major towns of the country and its increasing price and fare in particular.

Moreover, the actual practice of public transport in Ethiopia as a whole faces immense practical problem, which are manifested by users claiming that the sector is continuously lagging behind and not providing the service in line with the demand of the public. For instance, Zewdu (2014) identified problems with the failure of concerned actors (public bodies and associations) to improve public transport. He further identified their failure as a lack of improving the capacity of bus stations against the increasing number of users, being unable to balance the interests of customers and owners in setting tariffs, lack of training in proper handling of customers, lack of incentives for service providers, and incurring additional unnecessary costs by providers, to name a few (see p. 4). All the above problems have implications for the end users in terms of the price of public transport. This is particularly evident with the increasing public transport fare, while the government intervention is weak in implementation and fails to consider the existing conditions in setting the transport tariff. Despite the government's intervention in terms of the fuel subsidy scheme for public transport, there are practical problems with the escalation and hiking of public transport fares.

Therefore, this paper aimed to contribute to the body of literature regarding the increasing fares of public transport and shows that the problem needs extensive and detail research. The paper also aims to critically analyze the efforts that the government took to stabilize and control the price hike, its practicality, and its success in public transport service from Woliso town to AA and vice versa. In general, no one knows (not scientifically studied) what users, the government, providers (drivers and assistant) think about the existing problems. Hence, the research tried to address this gap by answering the following research questions:

1. What are the causes of the rising operating costs of public transport from Woliso to AA and vice versa?
2. What are the main causes of the price irregularities and increasing fares of public transport from Woliso to AA and vice versa?
3. What are the roles of actors, and how do they discharge their responsibilities in dealing with the price hike of public transport from Woliso to AA and vice versa?

## Objective of the Study

### General objective

The general objective of the research is to investigate and describe the hiking of public transport tariff between AA city and Woliso town.

### Specific Objectives

This study attempts to address the following research objectives:

1. To identify causes for the increasing operating cost of public transport from Woliso to AA and vice versa
2. To identify and describe the cause of price irregularities and hikes in public transport from Woliso to AA and vice versa
3. To describe the roles and responsibilities of various actors in dealing with public transport price hikes from Woliso to AA and vice versa

## Scope to the study

The scope of the research is limited to the route of public transport from Woliso town to AAcity and vice versa. The justification for the selection of this route is twofold. First, the traveling time from Woliso to AA takes a maximum of one and a half hours in normal conditions. But currently, it takes at least more than twice the normal traveling hour (>3 hours). This has its own implication on the choice of time of travel, mode of transport, place to start travel, and price of transport, which leads to its own practical problems for both service providers and travelers. Second, given the above challenges to transport from Woliso to AA and vice versa, Woliso town transport authority and Woliso town medium and small public transport stations made their best efforts to control market and price irregularities by implementing different mechanisms even more tightly than Addis Ketema medium and small public transport terminals.

Thematically, the scope of the paper is limited to the increasing or hiking of the price or fare of public transport services. For inclusive analysis, the increasing price of public transport fares is seen in light of some indicators of public transport services. The primary focus of the paper is to assess the cause of the hike in public transport prices from Woliso to AA and vice versa since.

## Importance of the Study

Transport is an essential service for the overall life of communities. The actual price of public transport is subject to different factors. In most cases, the government might set a price or tariff for public transport and tightly control or regulate the sector for the optimum benefit of the larger public. However, government intervention in the sector mostly not resulted in effective protection of users, and what is actually happening is a result of the limited government's policy interventions in the public transport service system. This paper attempted to identify and uncover the missing link between government policy decisions and actual conditions in the transport sector in the study transport route, AA-Woliso round trips. Such a missing link resulted in transport tariff policy implementation challenges and failure, and the government tariff is seldom accepted by providers and users alike. It would provide a glimpse of implication and alarm to policymakers and public authorities in setting intervention instruments to consider the real problems and views of multiple stakeholders’ interests in making decisions. It also provides future research implications for the concerned scholars to conduct comprehensive and detailed analyses of the costs, prices, and quality of public transport services in the country.

## Limitations of the Study

The paper emphasizes on the identification and description of factors that resulted in the hike in the public transport fare from Woliso to AA. Hence, it uses limited factors that affect the price of public transport and its implication for the quality of transport service. However, a comprehensive and thorough methodological procedure has not been used to make a deep analysis to set correlations and regressions between price, factors, and the quality of public transport. Methodologically, it emphasizes describing the existing conditions and problems regarding public transport from the respondent’s point of view.

## Definition of Key Terms

**Actual price**: the amount of transport fare that the public transport passengers actually pay to the providers.

**Nominal price:** the tariff/price of public transport that the government set but mostly ignored by providers of public transport

**Operating cost**: A cost that public transport service provider incurs including fuel cost, service cost, allowance, spare parts cost, commissions and others that the service providers are paying in normal condition.

**Price/tariff hiking**: the upward movement of public transport service even beyond the tariff that the government set.

**Price Variation**: Amount of price more than government tariff. It is expressed as actual price minus government tariff.

**Public Transport**: A transport services that provided to the mass public by private providers but regulated by the public authorities. It is a shared passenger transport service which is available to be used by the general public.

**Subsidy**: the refund made by government to the owners of the public transport vehicles in response to increasing price of fuel.

**Regulation**: Government intervention in public transport by setting policies and regulatory frameworks.

## Organization of the Study

The research is organized into five chapters. The first chapter is the introductory part of the research and constitutes the background of the study, the statement of the problem, the objectives of the study, the significance of the study, the scope of the study, the limitations of the study, and the organization of the study. The second chapter is concerned with a review of related literature, which constitutes the third chapter focuses on research methods and methodology, including research philosophy, research approach, research design, study participants, sources and methods of data collection, and data analysis tools. The fourth chapter deals with data presentation, analysis, and interpretation of the collected data. The last chapter contains a summary of findings, conclusions, and recommendations.

# Chapter 2: Literature Review

## Introduction

This chapter provides a brief review of related literature regarding the subject matter under investigation. It presented important theoretical and imperial evidence that supports addressing the research gap and research question in a certain manner. Hence, it first presents the public nature of transport, which deals with why transport is considered a public service. It also specifies factors that affect the operating costs and price of public transport and the roles of actors in controlling the price hike of public transport. Moreover, the policy roles of the government (government intervention) in public transport are also presented in this chapter.

## The Nature of Public Transport as Public Utility

Transport in general is an essential service in people's daily lives. Transport is considered one of the most important public utilities that need to be delivered to citizens, despite their levels of income. Public transport is the most widely recognized service in this respect. Public transport in any setting plays an important role in providing eco-friendly, affordable, and sustainable service, and it is a basic for the socio-economic development of a community. Chocholac et al (2020, p. 88) argue that “public transport services address sustainable challenges to integrating environmental “eco-efficiency” and social sustainability with the inclusion of all stakeholders to provide better service and efficiency.” Hence it provides a basic service to community with limited environmental impacts compared to private car.

As part of public utilities, it is a critical and basic necessity for socio-economic development and has political implications. Because of its basic nature, public transport needs government regulation and intervention in different ways. It is not only a public utility but also considered a welfare activity in which government needs to invest huge resources for its sustainability and affordability (Redman et al, 2013). Verma and Ramanayya (2019) argued that public transport systems are known to be sustainable modes in terms of space, energy efficiency, and environmental and social benefits. A good networked public transport system with time-bound schedules, reliable services, comfort, competitive travel times, and affordable prices are some of the required traits for providing sustainable transport services and commuter satisfaction.

In short, public transport is one of the most important public services that need the participation of both the government and private sectors. Public utilities provide essential services needed by every individual and every other institution in a society (McNabb, 2016). McNabb also identified two key factors that distinguish the majority of the utility industry from other economic endeavors. According to McNabb, elements of the utility industry operate under socially sanctioned conditions of monopoly competition, and one or more elements of the organizations’ operations or supply chain are regulated by one or more levels of government. These two factors interact in the management and regulation of the operation of public utilities. For instance, public policy and public opinion expect different conduct in many managerial matters, including the setting of prices, the mandate to meet all service-area demand, and restrictions on allowed operating profits, among others.

McNabb (2016) also states that as public utilities provide essential public services that are considered to be endowed with a public interest, utilities management requires both public and private sector management knowledge. Market economies must often balance conflicting social and private interests. This is paramount in the utility industry, where there are a variety of conditions under which economic activities take place. At one end of the range of conditions are the privately owned, non-regulated businesses, and at the opposite end of this continuum are the government-owned organizations. In between, there are privately owned but strictly regulated business undertakings in public utilities. These utilities have been subject to government regulation at either the federal, state, or local levels, or all three levels at once. In Ethiopia, public transport services constitute a mixture of publicly and privately owned service providers, which are highly regulated in both cases.

Based on the nature of public utilities, McNabb (2016) also identified six distinct ways in which they are distinguished from other economic activities. Public utilities differ from other business organizations in many other ways. Six of these differences are: (1) utilities are legally required to serve all customers in their market area without discrimination; (2) they are generally neither exclusively profit or nonprofit; a mix of both types of organizations exist, often side-by-side; (3) utility income often includes a mix of earnings from rates charged customers, stocks and bonds, and/or taxes; (4) utilities are economic organizations because there is a cost to produce and a price for supply of the products, regardless of what form of ownership or governance that characterizes the organization involved in the industry; (5) utilities often practice legally sanctioned price discrimination; and (6) prices for the utility’s product or service often do not reflect supply and demand market forces ( ).

As part of a public utility, public transport shares the above characteristics as public utilities. Particularly, the tariff of public transport is one of the mechanisms by which the government manages the inclusiveness of such services. In this regard, Šipuš, Abramović & Gašparović (2019) argued that the overall consideration of a tariff system in public transport in the context of preventing transport disadvantage is an integral part of social politics and transport planning. This is in line with McNabb's characterization of public utilities provided above. Šipuš, Abramović & Gašparović (2019) also argued that by creating a model of a fair tariff system in integrated passenger transport, it will be possible to determine a reasonable cost for offering public transport services. Identification of the just criteria for determining the tariff zones in integrated passenger transport, which would be utilized to define the pertinent criteria for setting the values of tariff zones, is a prerequisite for such an endeavor. According to the authors, planning for public passenger transport must include social justice-based optimization of tariff systems.

Moreover, the tariff system and its design should balance the interests of the private providers (the profit motive), the public interest (public or social motives), and the political interest (government policy intervention). Despite the fact that the design of public transport's tariff or fare is one of the most complex and demanding endeavors, it is an important issue in the effective management of public transport. Different mechanisms and systems are used in determining public transport tariffs, namely the distance tariff system, the simple unite tariff system, and the zone-based tariff system (Hamacher & Schöbel, 2004; Schöbel, 2007). In all instances, the tariff design and its adjustment need to balance the interests of each concerned stakeholder to provide an optimal service and contribute to the socio-economic advancement of the given society. In essence, Schöbel contended that designing a new tariff system and its rates is the challenge in tariff planning. A frequent condition is that the public transport company's new revenue should not be less than its present revenue. The new method, however, ought to be well received by the customers. The idea behind this is that government policy intervention should balance the public interest and the interests of public transport companies (especially if the providers are in the private sector).

## Factors Affects the costs of provisions and price of public transport

Literature identifies different factors that affect the cost and price of public transport services. Effective policy and planning in public transport is important for the effective delivery of service. However, to make effective policy decisions and interventions, one needs to have a good understanding of the factors, situations, and problems that characterize public transport service. One of the most important and first step is building sustainable and quality transport infrastructures. Roads are the most important transport infrastructure for providing access to rural and urban areas in Ethiopia. The government has placed increased emphasis on improving the quality and size of the country’s road infrastructure. The government formulated the Road Sector Development Programme (RSDP) in 1997 with the aim of increasing road transport infrastructure and reliability and strengthening institutional efficiency in road sector management, which resulted in an increase in the road network, road density, and proportion of the road network in good condition, vehicle population, kilometers traveled, and overall quality of the road. The 2020 National Transport Policy of Ethiopia is also aimed at providing improved and equitable transport infrastructure (Ministry of Transport, 2020).

Therefore, availability of effective and quality transport infrastructure is important factor that affect the overall quality of transport and the cost of transport. Comité Européen de Normalisation (2002, p. 8) identified 8 criteria by which the public passenger transport quality is measured as;

1. Availability – the extent of provided services in terms of geography, time and frequency.
2. Accessibility – access to the public transport system including the connection between different transport modes.
3. Information– systematic presenting of information and observations about the public passenger transport system that help to plan and realize the journeys.
4. Time – all time aspects important for planning and realizing journeys.
5. Customer care – the service elements introduced in order to harmonize individual customer requirements and provided service standard.
6. Comfort – the service elements introduced in order to make the public transport services usage comfortable and pleasant to passengers.
7. Safety – the feeling of personal safety truly perceived by passengers that arising from actual established measures and activities.
8. Ecological impact – the minimization of a negative impact on the environment

The above quality criteria have their own implications for the costs and prices of public transport. The factors are linked to the fare of public transport either positively or negatively. Particularly when the government heavily intervenes in the sectors through different mechanisms such as setting fuel prices, setting tariffs, and providing subsidies, the quality criteria are highly affected by the actual price that passengers pay. In the case where the private sector is the provider and the government is the regulator of public transport, As a result, for any government policy intervention to be effective, the aforementioned transport quality criteria must be considered. In short, as argued by Šipuš, Abramović and Gašparović (2019) the entire design of a tariff system in public transport in the context of preventing transport disadvantage is an essential component of social politics and transport planning.

Furthermore, several variables influence public transport in general and the tariff that the government must create in particular. According to Šipuš, Abramović and Gašparović (2019), in general, public transport price design should seek to ensure socioeconomic inclusiveness. They also stated that building a model of a fair tariff system in integrated passenger transport can assure calculating a fair cost for delivering public transport services. One of the prerequisites for such an endeavor is the identification of fair criteria for defining tariff zones in integrated passenger transport, which would be utilized to define the necessary criteria for creating tariff zone values. Tariff system optimization based on social justice is a critical component of public passenger transport planning. This is particularly important in developing countries like Ethiopia, where private transport means is highly and absolutely in shortfall.

There are also other factors that affect tariff of public transport. For instance, appropriate and sufficient investment in transport infrastructure has direct and indirect impacts on public transport. Capital investment in road infrastructure improves road quality which further improves public transport in general. In this regard, Weisbrod & Reno (2009) identified four important impacts of capital investment in public transport. They argued stated that;

While the effects of public transport investment can be of significant interest, longer-term travel benefits are a fundamental justification for public transport investment that can ultimately lead to greater and more lasting impacts on an area’s economy. Direct benefits for travelers fall into four core categories: (1) travel time savings, (2) travel cost savings, (3) reliability improvements and (4) safety improvements. All three types of benefits can provide monetary savings for both public transport passengers and for travelers who continue to use other transport modes. (p. 12)

Another aspect that influences public transit fares is the operational cost of service providers. It is stated that public transport, regardless of who provides it, necessitates significant investment and considerable operational expenses. Improving public transport service through capital investment has an impact on the public transport fare as it reduces costs for the provider and travelers, saving travel time (ibid.). According to Verma and Ramanayya (2015) (see table 7.2, p. 199), the operating costs of public transport include personnel costs, maintenance costs, interest costs, depreciation costs, fuel costs, and miscellaneous costs. In order to deal with the costs of public transport, global trends show that the government provides subsidies to private providers. Viewing public transport as a public utility, most European countries are providing subsidies to reimburse the cost of public transport. Verma and Ramanayya (2015, p. 202) argued that "in European countries like the United Kingdom (UK), France, Sweden, and Switzerland, the cost of operation of public transport buses is subsidized by the states from about 40% to 75%." They also said that tax exemption or reduction is also an important government intervention to reduce the costs of private provision of public transport.

Furthermore, regulation is an important feature of public transport. Regulation is critical in managing the cost and price (fee) of public transport, a role that numerous regulatory governmental authorities perform. One of these regulating techniques is government intervention in public transport. The government is widely regarded as having a political, social, economic, technological, and logical duty to act in the public transport sector. This is why the government intervenes in public transport using different policy instruments such as the construction of transport infrastructure and facilities, regulating the price of fuel, setting transport fares, providing subsidies, and directly engaging in delivering the service. Therefore, the existence of effective regulatory mechanisms resulted in effective control of transport prices for public users. However, as concluded by Sohail, Maunder, and Cavill (2006), if any type of regulation is to be successful, it must be transparent, honest, and effective without being overly complex or heavy. Effective regulation also depends on stakeholder coordination and communication.

# Chapter Three: Research Methodology

## Introduction

In this chapter, the philosophy and methodology of the research are presented. The part starts with the philosophical underpinning and foundation of research and continues with research design, approach, and other technical issues and procedures by which the research is executed.

## Research Philosophy

In this research, a critical postmodernist research philosophy is used. The problem of public transport in general and the hike in its price in particular are characterized by contestation between at least four formal actors or direct stakeholders: the owners, the driver and assistant, the government, and the transport service user or public. Each of these actors has their own interests and perceptions regarding the price of public transport. It is common that the interests of these actors in the public transport system are conflicting and contested. Hence, critical postmodernism is an appropriate research philosophy for this particular research.

Critical postmodernism is a synthesis of critical theory and postmodern theory. The goal of critical theory is to expose, critique, and change the distorted reality of social practice and ideology. As a result, it serves an emancipatory function, requiring a researcher to uncover the current unequal and oppressive social, political, and economic order and raise critical consciousness (Mack, 2010; Stinson and Bullock, 2012). According to Crotty (1998), cited in Stinson and Bullock (2012), critical theorists believe that marginalized people and/or groups will exercise their right to participate in the socio-cultural and historical transformation of their society with a critical consciousness as they become critically aware of their true situation, intervene in it, and thus take control of their destiny. However, critical theory has limitations in indicating what happens after emancipation and consciousness creation. As a philosophy, postmodernism is renowned for its inclination toward deconstruction, which aims to alter the prevailing philosophy of foundationalism. Critical postmodernism reflects the advancement of new theoretical mediums and new ways of theorizing to contextualize knowledge by critically assessing the foundational propositions (Javis, 1998).

Critical postmodernism emphasizes the plurality of truth as opposed to positivism. In Ethiopia, there are multiple actors with multiple perspectives in the public transport sector. Hence, this paper attempts to see and contextualize these multiple and contested notions of public transport prices from various angles.

## Approach

Mixed approach was used in this research. Mixed method is used to present the opinion of users of public transport by using frequency, percentage and other descriptive statistics. Moreover, the contested narration regarding the price and factors that affect the price of public transport is presented form perspective of diverse actors (owners, derivers, assistant of deriver, users and regulatory bodies). Hence a mixed approach is appropriate for this research.

## Research design

In this research descriptive and critical research design was used to present the existing reality as it is and critically analyze the reality to reach a conclusion. For description, frequency, mean and percentages of the data extracted from SPSS were used to indicate the factors that affect the price of public transport from Woliso to AA and vice versa. Once the data presented by using descriptive design, the data presented were critically analyzed by using both primary and secondary data to indicate what is really going in the public transport tariff design, actual price imposed at delivery point and the roles of regulatory bodies in implementing government policy intervention.

## Target population, sample selection and sample size

The target population of this research includes passengers, and drivers and assistant from Woliso town to AA city and vice versa. Moreover, Woliso town transport authority, bus station workers and workers of Addis Ketema small and medium public transport terminal are also the target population.

The sample from the target population was selected based on inclusion and exclusion criteria. For passengers, the inclusion criteria include permanent residence in Woliso and travel to AA at least three times a month. Hence passengers who are not permanent residents of Woliso and not traveling tri-monthly are not included in the sample. The exclusion and inclusion criteria were asked first while distributing questionnaire to the respondents. Moreover, convenience method of sampling was used to select respondents at the two bus stations and during travel. For drivers and assistants, their experience in provision of service was taken into account in the selection of the respondents. Therefore, drivers/owners and assistants that has at least one year experience was selected for interview questions. For the sake of analysis, codes are assigned to the respondents (see annex 4: table 2).

Therefore, based on the above sampling design and inclusion and exclusion criteria, 30 respondents were used to fill the questionnaire, 15 respondents were used for interview from different concerned actors in the system of public transport service. The sample size for both questionnaire and interview was determined based on data saturation.

## Sources and types of data

In this research, both primary and secondary sources of data were used. Primary data was collected from passengers, drivers, assistants, station/terminal workers and concerned public authorities. From passengers, the data was collected by using questionnaire. The questions that aimed at collecting the opinion of the passengers was prepared by using different types of questions such as categorical, ordinal and scale question on different point. Drivers, assistants, station workers and transport authorities were approached through interview. Moreover, the existing situation was also observed through lived experience. Occasional oral discussion was also conducted with drivers, assistants and passengers to substantiate observation and lived experience.

## Data collection tools

The data were collected by using questionnaire, interview, participant observation, lived/personal experience, oral discussions and document review. Questionnaire was distributed to purposefully selected (based on the inclusion criteria mentioned above in this chapter) passengers from Woliso town to AA and vice versa. Interview was conducted with drivers and assistants, transport authorities and station/terminal workers. Additionally, participant observation, lived experience and oral discussions were also used to collect what is really happening at the actual service delivery points (station/terminal and on the journey from Woliso to AA and vice versa.

## Method of Data Analysis

The collected data were analyzed by using narrative and descriptive analysis. Data collected from passenger through questionnaire were entered into SPSS version 20 and frequency, percentage and mean are used to present and analyze the data. The data collected from interview and document were presented and analyzed under the theme it represents. For the sake of simplicity, codes were assigned to the interviewee and response to open ended questionnaire is also included in the code. The data collected from various instruments were used together under the themes they represent. The descriptive statistics is supported by narrative data to make the analysis more critical.

## Ethical Consideration

In conducting this research important ethical consideration was taken into account. Particularly, during data collection, permission was granted from the respondents and the respondents who were not voluntary are appreciated. Moreover, the personal information of the respondents is trickily kept secret during the collection and analysis of data throughout the research process. The information collected through interview was coded to keep confidentiality.

## Chapter 4: Data Presentation, Analysis, and Discussion

## Introduction

In this chapter, the collected data was analyzed, discussed and presented based on the thematic area the data belongs. The data collected from both primary and secondary data were concurrently used in such a way that one supports the other. The primary data was collected from 15 informants selected from Woliso town transport authority, Woliso town bus station, Addis Ketema Medium and Small public Transport Terminal, Oromia National Regional States Transport Authority. Moreover, data was collected from 30 passengers using Questionnaire. Additionally, lived experience, oral discussion (while traveling) and participant observation were also used to collect what is really happening in public transport service delivery system. The mix of purposeful and snowball sampling method was used to select the key informants and respondents.

## Factors that Cause Increasing Operating Costs of Public Transport

Various factors are contributing to the increasing operating costs of public transport from Woliso town to AA round trip. Theoretically, some of these factors are not unique to the Woliso-AA public transport service. For instance, increasing prices of fuel, spare parts, and additional (administrative and mal-administrative) costs are common to the whole transport sector of the country. In this regard, Gidebo and Szpytko (2019, p. 28) argued that "the major means of transport in Ethiopia is road transport, which has many problems and can be characterized by a very low level of reliability of the transport system." As argued by the key informant interview selected from all actors (service user, government, and provider), multiple factors extremely affect the operating cost of public transport from Woliso town to AA and vice versa. While the government and public provide a little bit of a different argument regarding the impacts of the price of fuel from the providers, both the public and government share the same argument with the providers of public transport regarding the impact of the increasing price of spare parts, roughness of the road, and traffic congestion from Sebeta to Addis Ketema Small and Medium Public Transport Terminal (DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTTA/002, AKSMPTT/001, AKSMPTT/002, AKSMPTT/003). The key informants state that;

When setting transport tariffs, the government fails to consider the increasing price of spare parts. The government offers subsidies to offset rising fuel prices and adjusts the amount refunded to owners and providers on a regular basis. With the price of fuel increasing to 71.80 Ethiopian Birr (ETB), the subsidy had been reaching 1299 ETB. However, the subsidy is decreasing from its prior level to 975 ETB without modifying the price of fuel or the transport tariff paid to the service provider. The government has purposefully increased and imposed burdens on providers. The government failed to consider the character of the road, which has a major influence on the health of the automobile, resulting in the constant replacement of spare components. However, the cost of spare components has at least doubled. For instance, the price of a tire or wheel was two-four thousand birr before two-three years. But it is twelve thousand Ethiopian birr at the current time (DR/A/001, DR/A/002, DR/A/003).

The key informants from the transport authority and station/terminal workers also share the above concerns of the owners and/or derivers. According to the informants comprised of drivers and assistants, the government tariff design was based on the adjustment of the price of fuel while failing to recognize the price escalation of the wheel and other spare parts. In this regard, there are contradicting ideas among the informants at the regional level transport authority. While some of the respondents from the Regional Transport Authority argued that tariff design depends solely on the price of the fuel (OTA/001 and OTA/002), While it is commonly the case that the tariff of public transport is designed based on multiple factors such as the level of the car, the present value of the car, the nature of the road (asphalt and gravel), and the price of spare parts (OTA/ The claim here is that, whatever the criteria used in designing the tariff, it is not adhere by the providers in most cases, and the informal transport service providers and illegal brokers (the *Bashari*) are imposing a higher price than the government tariff (OTA/002, WTTA/001 and WTTA/002).

Moreover, all informants from all actors still argue that there are informal actors that engage in gaining benefits or collecting rent from public transport by manipulating and creating artificial barriers and shortages in the formal bus station. Moreover, there exists, which is also shared by other actors, a rapacious desire among all parts of the public transport sector to profit within a short period of time (WTTA/001, WTTA/002). Theoretically, this is a conflict between the public nature of transport services and the profit-oriented (commercial) private providers. This is particularly true in the case study because of the absence of mass public transport and a publicly owned transport service provider. According to the informants, the lack of mass public transport, particularly in short and medium-distance public transport is one of the key problems that challenge the implementation of government tariffs (OTA/003 and OTA/004).

Moreover, the nature of the road from Woliso to AA is another reason for the increasing operating cost of public transport. Despite the 1997 Road Sector Development Programme (RSDP) and the 2020 national transport policy emphasizing the improvement of road transport infrastructure, the road infrastructure from Woliso to AA has deteriorated mostly since recent times, and its construction and maintenance are lagging behind. This is in line with the conclusion made by Gautam et al. (2020) regarding the overloading that significantly accelerates the rate of deterioration of road pavements, accompanied by inadequate funding for road maintenance, contributing significantly to poor road conditions and high transport costs. In this regard, even if the tariff is prepared based on the nature of the road, the current situation indicates the tariff policy has failed to consider the nature of the road from Woliso to AA (DR/A/001, DR/A/002, DR/A/003), as the tariff in the case study considers the road as asphalt while the road is highly degraded.

Therefore, the main causes for the increasing costs of operation in public transport from Woliso to AA and vice versa are bad or poor road infrastructure, increasing prices of fuel and spare parts, additional administrative and unnecessary costs by service providers, the absence of strict regulation and follow-up of the implementation of government regulatory instruments by regulatory bodies. There is also partly a traffic jam from Sebeta to Addis Ketema and vice versa, which consumes 1:30–2:00 hours (equivalent to a single trip hour from AA to Woliso in normal conditions), the participation of informal public transport providers, and illegal brokers. In short, the high operating cost of public transport from Woliso to AA is a function of the fuel price, the roughness of the road, the hike in the price of spare parts, and additional (unnecessary) expenses incurred by the public transport providers. Hence, it is possible to say that Ethiopia's Climate Resilient Transport Sector Strategy, which aimed at improving public transport services and transport infrastructure (Ministry of Transport, 2016), government has failed to achieve its goal in the case.

## Price Irregularities in public transport from Woliso to AA

Despite the government setting the price of the fuel, tariff, and providing fuel subsidies to public transport in general, the respondents, lived experience and personal observation indicate that there is a price irregularity in the provision of transport service from Woliso to AA and vice versa. The price irregularities, however, differ based on the place of starting, time of travel, and modes of transport. The irregularity of transport prices based on level of transport is actually determined by the public authority, which takes the level (categorized based on the production year of the vehicles) of the car into account (see annex eight) and the nature of the road (asphalt and gravel). Hence, in the case study, a distance-based tariff system is used to determine the public transport fare or price. First, the Regional Transport Authority designs a public transport tariff (see Annex 8A) for each level of car and type of road per kilometer. Based on the public transport tariff of the Regional Transport Tariff, the Woliso Town Transport Authority set the overall tariff of public transport (see annex eight B, for instance).

Despite the design of the tariff for each level of transport (WTTA/001, OTA/002, OTA/003, OTA/004), the respondents (government authorities, passengers, drivers, and assistants) admitted that imposing a higher price on the passengers is a common practice (WTTA/001, OTA/002, OTA/003, OTA/004). Most of the time, the higher price is imposed based on the modes of transport by the passengers. Personal experience and observation indicate that sometimes, for the purpose of reaching their home or business on time and reducing conflict with the driver and assistant, passengers willingly pay more than the tariff that the government sets. Moreover, 20% and 36.7% of respondents to the questionnaire said that the impact of user interest on price variation is high or very high (see annex 5, table 10). The response to the open-ended questionnaire indicates that the users are not strictly challenging the imposition of an additional amount above the government tariff (PROEQ). Observation, personal experience, and interview results also indicate that the users are hiding the imposition of a higher price than the government tariff from the regulatory bodies in the bus station/terminal and traffic police on the street (AKSMPTT/001, AKSMPTT/002, AKSMPTT/003, PROEQ). In this respect, responses from drivers and assistants indicate that the public and users know the existing situations and are mostly willing to pay a marginal addition to the government tariff (DR/A/001, DR/A/002, DR/A/003), while most of the public and users claim that they have no choice to deny and resist the imposition of more than the government tariff (PROEQ).

Sometimes, the government (regulatory body) might adjust the tariff, which was initiated by the imbalance between demand and supply because of the practice of hiding vehicles and participating in informal ways of loading and unloading. In this regard, Kassa (2014) rightly argued that the existence of informality led the traveler to be lured into suffering by hiding the vehicles in an unusual location to load the passengers. Most of the time, the operators load the passengers by concealing the vehicles from traffic cops and government regulatory bodies with authority over the business. Unlike such informality, the case of Woliso to AA and vice versa is characterized by the informal deal between providers and passengers around and in the bus station or terminal to impose a higher price than the government tariff. This is particularly common as the passengers do not want to get into conflict with the providers (drivers and assistants) and get easily accessible and timely transport service. Respondents to an open-ended questionnaire indicate that the limited accessibility of cars and a lack of cooperation among users exacerbate this problem. Sometimes the passengers cooperate with the drivers and criticize the ones who deny paying more than the government tariff (PROEQ). This is because the common practices of the drivers, in which they intentionally reduce the speed of the car (systematic soldiering[[1]](#footnote-1)), lead to wastage of the time of the passengers on the journey.

Such price irregularities are common in normal conditions (even within the station or terminal) and even very high during holy days and when there are large numbers of passengers as compared to the existing service providers. This is a common trend in the transport services in the country (OTA/001, OTA/004). Knowing this, the service providers artificially created a shortage of public vehicles at the bus station/terminal (WTTA/001). For instance, in Woliso Bus Station, upon the establishment of an integrated e-ticket center (see figure 1), the providers intentionally hide their cars and decide not to enter the station to load passengers (WTTA/001, WTTA/002, WTBSW/001, WTBSW/002). This resulted in a shortage of vehicles in the station, pushed the transport fare up, and forced the transport authority and station/terminal workers to adjust the tariff to resolve the problem of the artificial shortage. The key informants express this situation in the following manner;

Because of the regulation that the bus station has with the transport authority of the town, the drivers are not willing to enter the station and provide the service as per the government's tariff. Therefore, most of the time, we are forced to penalize the providers to control such behavior and enforce their obligation to provide the service. There are multiple stakeholders that prevent the effective delivery of public transport service as per the government's tariff. These stakeholders intentionally created an artificial shortage to be benefited from the increased price of transport (WTTA/001, WTTA/002 and WTBSW/001).

In this regard, there is a common name (identified during observation and personal experience) provided to the illegal actors around and in the bus station in this respect, called *Bashari*, to refer to the informal brokers that operate in and around the bus station. The *Basharis* are the main players in recruiting passengers to cars that engage in informal service provision. They are acting as if they are the shareholders and sharing in the increased price of transport. From observation and life experiences, in this case, it is the *Bashari* who determines how much to pay, who should be recruited as a passenger, and the mode of transport. In some cases, the *Basharis* price policy is more nuanced than the government's policy intervention, and they determine the price, which is practically applied, rather than the tariff that the government sets (OTA/002, OTA/003, OTA/004).

In bus station, the provider has some legal sanction not to impose at least an exaggerated price of transport, but still the providers are dealing with user to charge more than the normal tariff of government. For instance, in Addis Ketema Small and Medium Public Transport Terminal, such negotiations are made between passengers and the provider first at the gate during the loading time (as identified by personal experience and observation). If the passengers feel that they have no alternative and are willing to accept the price, they will peacefully travel without interring into conflicting with providers or choosing other modes of transport. Surprisingly, the passengers are ordered by the driver and the assistant not to expose the imposed but agreed price, and the passengers are pretending as if they have paid the normal government tariff in front of the regulatory officials of the station and traffic police (PROEQ). As there are no mechanisms for the passenger to defend their rights (partly because of the fear of criticism from fellow passengers) and weak regulation by enforcing agencies, the only thing that the passenger has is to create a harmonious relationship with the driver and assistant to arrive timely and get safe transport service. Respondents from the regulatory body argued that the lack of alternative public transport (mass transport, for instance) is one of the factors that contribute to the imposition of more than a tariff (OTA/001, OTA/002)

Most of the passengers, as identified through observation and personal experience, argued that it was not the driver that took me to my home, nor the official of the station, nor the traffic police. Such reservations lead to the ignorance of the price irregularities by the passengers, particularly at Addis Ketema Small and Medium Public Transport Terminal and at Woliso outside the bus station. All passenger respondents share common views regarding the existence of price variation in public transport as compared with government tariffs. From the sides of the government and regulatory bodies, the claim is that it is the passenger who should protect their rights and expose the misbehavior of the providers and the imposition of additional prices beyond the government tariff (AKSMPTT/001, OTA/004, OTA/003, OTA/004).

Therefore, the price that the passengers are paying is more than the tariff that the government set. The following table (table 3) indicates the perception of respondents regarding the real price they are actually paying to the providers of the service. Particularly comparing the overall low quality of the service delivered, 43.3% and 33.3% of the respondents assume that the price imposed by the providers is very high and high, respectively; that means 76.6% (33.3 + 43.3) of the respondents said that the price variation of public transport is at least high as compared to the government tariff and poor quality of the transport. That means the difference between nominal and actual public transport prices is at least high, according to the respondents. However, the price variation differs based on modes of public transport and starting points. For instance, based on observation and personal experience, the price variation is higher for minibuses (commonly known as dolphins and high-roof vehicles) (currently at least 40 birr higher than the normal tariff is imposed) than for Isuzu vans (currently maximum of 10 birr).

***Table 3: Respondent’s Perception on the Price of Public Transport***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very low | 1 | 3.3 | 3.3 | 3.3 |
| Low | 1 | 3.3 | 3.3 | 6.7 |
| Moderate | 5 | 16.7 | 16.7 | 23.3 |
| High | 10 | 33.3 | 33.3 | 56.7 |
| very high | 13 | 43.3 | 43.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

Source: Survey questionnaire (2023)

The respondents are also asked to indicate the ranges of price variations in relation to the tariff that the government set. Accordingly, 63.3% of the respondents indicate that the price variation (amount of money paid more than the government tariff, i.e., actual price minus nominal price) is more than 50 Ethiopian birr. Some respondents in the open-ended question indicate that the price variation sometimes exceeds 200 Ethiopian birr, particularly during the holiday weeks. The table also indicates that the respondents are paying at least 11 birrs more than the public transport fare (tariff) that the government set. This indicates that the government's intervention in pricing policy mostly failed to be observed by the stakeholders. This is particularly true of the words of respondents from public authorities, drivers, and assistants who indicate the government tariff is based on political logic and fails to consider the existing inflationary scenario of spare parts, the nature of the road, and other expenses incurred by the service providers. They cite the roughness of the road and traffic congestion as additional factors contributing to the increasing cost of providers, which forced them to charge more than the government tariff. The roughness of the road leads to the breaking dawn of care spare (spring, for instance, which costs 7000 ETB), which leads to additional costs (DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTBSW/001, WTBSW/002). The government tariff and subsidy failed to consider the additional cost that the providers incur in the provision of public transport in the case study.

However, there is a contradictory view at the regional level regarding the design of the public transport tariff. According to the respondents from Oromia National Regional State’s Transport Authority, the tariff is prepared based on different factors such as personnel expenses, fuel expense, tax, insurance expense, technical assessment and registration expenses, oil expense, bank interest, tire expense, maintenance cost, and miscellaneous expenses (OTA/003, OTA/004). But at the same time, there is a view that the tariff is designed and adjusted based only on the price of fuel, while other expenses are excluded from the tariff design and adjustment (OTA/001, OTA/002, OTA/005). According to these respondents, the tariff design takes the community's paying capacity into account rather than the economic cost-benefit analysis that has an impact on the profitability of public transport providers (OTA/005).

**Table 4: The Ranges of Price Variation (in birr)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Ranges | 11-20 | 1 | 3.3 | 3.3 | 3.3 |
| 21-30 | 1 | 3.3 | 3.3 | 6.7 |
| 31-40 | 3 | 10.0 | 10.0 | 16.7 |
| 41-50 | 6 | 20.0 | 20.0 | 36.7 |
| >50 | 19 | 63.3 | 63.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

Source: Survey Questionnaire (2023)

## Factors Responsible for Tariff hiking from Woliso to AA and vice versa

Multiple factors are responsible for the increasing operating costs of the public transport industry and service providers. The primary factors responsible for the increasing costs of public transport are the increasing price of fuel, spare parts, the nature of the road, additional administrative costs, and illegal payments (exit commission and bribes) to the regulatory bodies. The response from drivers, assistants, transport authorities, station/terminal workers, and passengers indicates that the operating costs of public transport are highly increasing because of the skyrocketing price of the above-mentioned necessary inputs in the transport sector (DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTTA/002, AKSMPTT/001, AKSMPTT/002, AKSMPTT/003).

Despite the subsidy that the government provides, respondents from all actors in the public transport system argued that the subsidy is not commensurate with the increasing costs of transport. This is particularly the case because the subsidy and the tariff are designed by the concerned authorities based mostly on the price of the fuel. While the fuel represents only a small portion of the factors that lead to the increasing operating costs of public transport, the government insists on enforcing the tariff it sets without considering the whole situation and the factors that highly affect the costs of public transport. Given that public transport utilities are highly essential for the public, they are still delivered by the private sector and associations. The government is regulating the sector through different mechanisms. However, there is a missing link between government regulation and the need for the private sector to earn a commensurate income and profit (DR/A/001, DR/A/002, DR/A/003, and AKSMPTT/001).

This indicates that the government tariff (price of public transport utility) is not responsive to the demand and interest of multiple actors and circumstances in the public transport system. This argument is in line with the argument of Vickrey (1971) in Responsive Pricing of Public Utility Services. Vickrey argued that ‘the main difficulty with responsive pricing is likely to be not mechanical or economic, but political.’ (p. 346). He asserts that the idea of right pricing from the medieval notion still has great appeal in modern public utility services and implies that the price of a good or service that is ostensibly the same should not change depending on the current situation. In our case, the government tariff is claimed to be non-responsive by different actors (WTTA/001, OTA/001, OTA/002, OTA/005, DR/A/001, DR/A/002, and DR/A/003). This is why the government's tariff is not observed by public transport providers. Moreover, notwithstanding the government subsidy, it is still observed that the government tariff policy remains nominal in most cases.

Such a missing link is the result of the political logic upon which the government makes a decision in this sector, which failed to consider the basic nature of public transport (and public utilities in general) as identified by McNabb (1971). As public utilities are politically, environmentally, and socially sensitive, the government makes decisions based on the political logic of serving the public. This failed to consider the economic nature of public utilities, in which both profit-making and non-profit (publicly owned) and profit-oriented (privately owned) organizations need to exist. The respondents argued that such political logic in regulatory decisions by the government is highly affecting private providers, which leads to conflicting relationships between regulatory authorities and providers, users and providers, and users and regulatory authorities (AKSMPTT/001, DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTTA/002). This is particularly affected by the modes of public transport. The minibuses (commonly known as Dolphin and High Roof) are subjected to high inflation of their spare parts, unlike the Isuzu vans (ኣይሱዙ ቅጥቅጥ[[2]](#footnote-2)).

Moreover, the respondents from the passengers are asked to indicate and rank factors that contribute to the increasing price of public transport and price variation from the government tariff. Table 18 (see annex five) indicates the rank of the variables in terms of their contribution to price variation. According to the table, lack of effective regulation stood at the top (with a mean of 5.7667) in terms of its contribution to the increasing price, while the increasing price of fuel was at the second (with a 5.1 mean). Low resistance from the users to the price variation, lack of alternative transport (no publicly owned transport provision), limited modes of transport (minibuses and Isuzu vans), starting time and place (at night and outside station/terminal, for instance), and boarding/ending point are ranked from 3rd to 7th in terms of their contribution to the price variation and increasing price of public transport (see tables 11 to 18). This indicates that the actual price imposed on the users of public transport is affected by multiple factors. According to the respondents from public authorities, station/terminal workers, derivers, and assistants, some of the most important factors that the government missed in setting tariffs are the hike in the price of spare parts, car servicing costs, and the nature of the road from Woliso to Addis Ababa. All respondents to the interview and observation indicate that such factors play their own parts in increasing the cost of providers, which resulted in the increasing price of public transport.

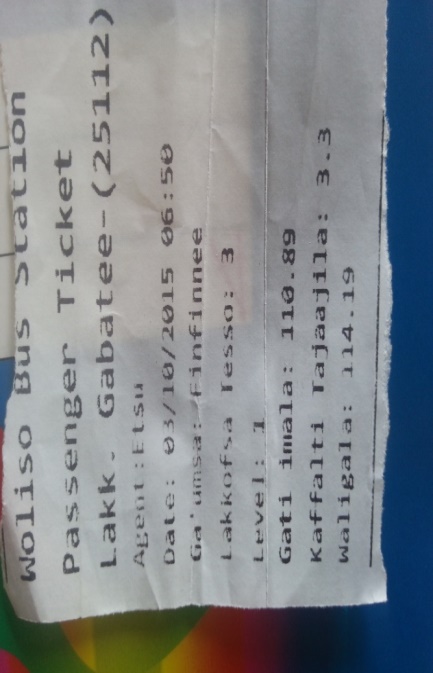
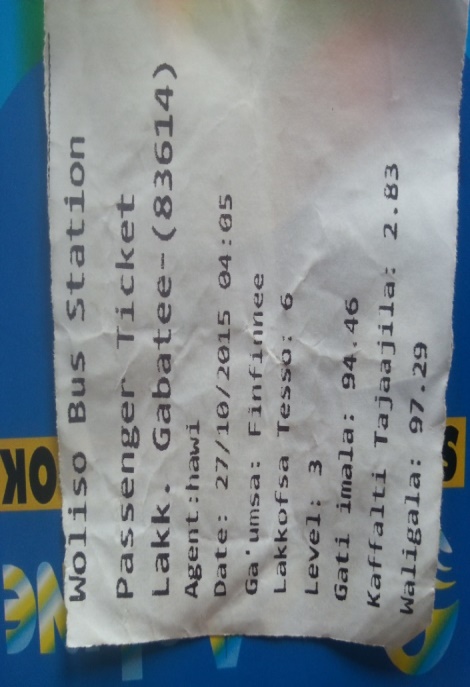
## Government Policy Interventions in Regulating Transport Price

There are three prominent government interventions in public transport in Ethiopia. The first intervention is setting the price of fuel in general. Here, it is the government that determines the price of fuel. Because of its strategic nature and its effects on the general economy, the price of fuel is highly regulated by the government. Given its regulation, the price of fuel in Ethiopia is steadily increasing from time to time and now reaches 71.08 ETB per liter. The retail price of benzene is 69.43 ETB per liter, up from 61.29 ETB, according to the Ministry of Trade. A liter of diesel costs a little more at 6.20 ETB, rising to 71.08 ETB, while a liter of kerosene costs slightly more at 67.30 Birr, rises to 71.08 Birr. These prices do not consider the informal vendors of fuel, which are known as "chiff-che" in the local language. But later, the government introduced electronic marketing in the selling and buying of fuel through tele-billing. Such government interventions are required to protect the interests of the public transport user, particularly to make transport costs easier for low-income households (DR/A/001, DR/A/002, DR/A/003).

The second government intervention is the provision of subsidies for registered public transport vehicles. The subsidy that is provided to the public transport providers is to regulate the fares of the public transport. Despite the logic behind the subsidy being to protect users from price escalation in public transport services (as part of a larger welfare service), the government intervention just remains a nominal price, which failed to be practiced in the majority of cases because of failed regulatory bodies during loading and unloading, within and outside bus stations and terminals, and throughout the root and travel processes. Despite the government’s initial intervention in the regulation of public transport service, it is argued that the subsidy will phase out, and this is contradictory with the constant upward increase in fuel prices and the absence of balanced tariff adjustment (DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTTA/002, AKSMPTT/001, AKSMPTT/002, AKSMPTT/003). The respondent’s claim is that this further increases a burden on the service providers, which highly affects the sustainability of the sector (DR/A/001, DR/A/002, DR/A/003).

The third intervention is government pricing policy. The Regional Government Transport Authority sets the price and tariff of public transport operated in the region. The tariff at the regional level is prepared based on the nature of the road and the level of the car (see annex 8 A and B). To implement the government's tariff, the town transport authority and bus station/terminal set different regulatory mechanisms. One important mechanism for price regulation is the establishment of an integrated electronic ticket center. This mechanism is started and functional at the Woliso Town Bus Station. As Figure 1 (an observation was also conducted) indicates, the electronic ticket officer issues the ticket to the user, and there is no direct contact between passengers, providers, or third parties until the user is in the vehicle. However, in some situations, the tariff that the government sets might be compromised and adjusted at the point of delivery during high-level shortages (created either artificially or there might be overflowing of passengers to the station from neighboring towns[[3]](#footnote-3))

***Figure 1: Electronic Ticket at Woliso Bus Station***

Source: photos taken by the author during data gathering and travel (2023)

The above tariff is applicable at Woliso Bus Station in some instances. Isuzu Vans particularly provide public transport with the specified tariff or with a very low upward increase in price over the government tariff. Observation and personal experience show that Isuzu Vans are implementing the government's pricing policy of public transport. However, the problem with Isuzu Vans in the bus station or terminal is the long waiting time in the process of loading.

## The Roles of Regulatory Body in Controlling Price Hiking

The regulatory authorities are responsible for either setting or ensuring the applicability of standards, setting prices or tariffs, providing subsidies, adjusting fuel prices, supervising stations and terminals, checking compliances, ensuring the sustainability of the service, and sometimes penalizing misdeeds or misbehavior by the service providers. Such regulatory responsibilities are assigned to different actors within the regulatory framework, which comprises MoTL, regional transport authorities, station and terminal workers, and traffic police. Each of these regulatory actors has their own roles and responsibilities, stretching from policy formulation and decision-making to implementation at the frontline service delivery level. From a tariff point of view, it is the Regional Transport Authority that determines and adjusts the public transport tariff in their respective jurisdiction. In this respect, the authority has a policy as well as a regulatory mandate for the public transport fare and price (OTA/001, OTA/002, OTA/003, OTA/004, OTA/005).

The respondents from passengers argued that one of the factors responsible for the increasing variation in the price of public transport is a weak regulatory mechanism at the frontline or service delivery point (PROEQ). Despite the regulatory frameworks designed by the government in terms of fuel price, public transport tariff, and subsidy to the public transport providers, not only the respondents from the passengers but also almost all observation, oral discussion, and personal experience indicate that the weak regulation and controlling mechanism are leading factors in the imposing of a higher price than the government tariff. In this regard, table 9 (annex 4) indicates that 11 (36.7%) and 13 (43.3%) of the respondents argued that the contribution of weak regulation is very high and high, respectively. Moreover, annex 5 (tables 12 and 18) shows that the respondents from the passenger group ranked lack of effective regulation as the first factor that contributed to the price variation among the seven factors listed. Moreover, 8 (26.7%) respondents from passengers listed a weak regulation as one of the problems that challenges the implementation of the government tariff and leads to increasing the real price of public transport from Woliso to AA and vice versa (PROEQ).

Response from the interview indicates that it is not only the price of fuel, spare parts, and roughness of the road that contribute to the price hike, but there are also multiple actors with multiple interests in the transport sector (WTTA/001, OTA/001, OTA/002, OTA/003, OTA/004). Accordingly, the sector comprises both formal and informal actors that have their own stakes and interests. This actor includes transport authorities, station/terminal workers, traffic police, drivers/owners, and assistants, who are the formal ones with their economic interests (WTTA/001, WTTA/002, AKSMPTT/001, AKSMPTT/002, AKSMPTT/003). While the primary interest of drivers, owners, and assistance providers is short-term economic profitability, they claim, particularly since the past two years, that the sector is highly challenging for the providers. Despite the fuel subsidy (which directly goes to the owners of the vehicles) that the government provides, it is not profitable to the drivers and assistants (DR/A/001, DR/A/002, DR/A/003) because of the costs they pay to multiple actors. This is particularly exacerbated by the illegitimate payment to the different formal and informal actors as bribes and commissions, respectively (DR/A/001, DR/A/002, DR/A/003, WTTA/001, WTTA/002, WTBS/001, AKSMPTT/001, AKSMPTT/002, AKSMPTT/003). What is special in this case is that the registered vehicles in the formal public transport schemes are participating in the informal service delivery to earn more than the normal tariff of the government, but at the same time, they are also receiving subsidies from the government. This argument is in line with the findings of Kassa (2014) that indicate the escalation of informal operators in public transport, which leads to the participation of legal vehicles in such informal operations to earn additional income.

The above argument is also confirmed by observation and lived experience: most of the vehicles that engage in loading and unloading practices outside the bus station or terminal are registered under the government subsidy scheme. This is particularly so because of weak regulation by regulatory actors, starting from the bus station or terminal, the process of the journey, and up to destinations. For instance, loading in front of the bus station and on the street at Woliso town is a common practice that is mostly unregulated by concerned regulatory actors. Weak regulatory practice also manifests the missing link between cooperation between regulatory actors and the users of public transport. This is particularly so because the passengers have no trust regarding the roles of frontline regulatory actors in most cases (WTTA/001, OTA/001, OTA/002, and PROEQ). The common argument of the passenger here is that the frontline regulatory actors are not concerned to protect the interests of the user but rather for their share of the increasing price of public transport (PROEQ).

Other regulatory challenges in the implementation of the government tariff that resulted in the imposition of an increasing fare on public transport for two years are regulatory malpractices. The argument from drivers, assistants, and passengers is that the regulatory actors at frontline levels are engaging in the sharing of the increasing fare of transport through corruption (DR/A/001, DR/A/002, DR/A/003, PROEQ). Hence, strict regulation at the frontline delivery of public transport implies the reduction of the regulatory actor from the increased fare of public transport. Therefore, as argued and observed, regulation and tariff control both within stations and terminals are weak and ignorant in most cases.

# Chapter 5: Summary Major Finding, Conclusion and Recommendation

## Major Findings

The price of public transport from Woliso to AA has skyrocketed, particularly in the past two years. Despite the fact that the situation is not unique to the region from Woliso to Addis Ababa, the evidence shows that different factors contribute to the price variation or hike of public transport services. Government policy interventions failed to consider the existing and various variables that affect the price of public transport, such as the increasing price of spare parts, unnecessary costs that the providers incur, the nature of the road from Woliso to Addis Ababa, and traffic congestions (particularly from Sebeta to Addis Ketema Small and Medium Public Transport Terminal), which lead to high operating costs for the public transport providers.

The causes of the failure of government policy interventions in this regard are the absence of stakeholder participation in designing the interventions and the contradicting views regarding the appropriateness of the interventions. While the providers have multiple claims regarding the government's intervention, the government makes decisions unilaterally without the participation of primary stakeholders. This is why the government's decision is said to be more political logic, which does not consider the interests of private providers (profit maximization). Hence, government policy intervention in this regard failed to balance the need for the achievement of the common good with that of vested interests.

Participation of illegitimate actors and informal practice in public transport service delivery exacerbates the price hike of public transport. Such practices resulted in artificial shortages of public vehicles at the bus station and terminals. Loading outside a bus station or terminal is a common practice that paves the way for the imposition of a fare higher than the government tariff. Moreover, the imposition of a higher transport price than the government tariff has not resulted in an improvement in the quality of public transport service. It is also found that there is a lack of institutional capacity, commitments, and linkages between regulatory bodies, public authorities, bus station/terminal workers, and users to ensure the implementation of government policy interventions. Weakness and ignorance among frontline regulatory actors are also contributing to the rising fares of public transport. Moreover, widespread regulatory malpractices are also the main drivers for the increasing fares of public transport.

## Conclusion

Different factors are contributing to the hike in the price of public transport from Woliso to Addis Ababa. The sector experienced increasing operating costs because of the increasing price of fuel, the increasing price of spare parts, unnecessary and additional costs and expenses, poor transport infrastructure, weak regulation, and weak or no public resistance to the imposition of higher transport fares. These lead to the skyrocketing of the operating costs of public transport providers, which affects the provision, quality, availability, and fare that passengers should pay. The government intervenes in the stabilization of the operating costs of providers by providing fuel subsidies to public transport vehicles. However, the fuel subsidy is just considering a portion of the increasing costs of service providers.

Despite the fact that the government provides a fuel subsidy to public transport vehicles and sets the tariff for public transport, it has failed to implement it in most cases. The prevalence of informal practice in and around bus stations and terminals, the participation of illegal actors in the public transport system, weak regulation, a low level of user resistance to the increasing price of public transport, regulatory misconduct (corruption, for instance), artificial shortages and traffic congestion from Addis Ketema Small and Medium public transport terminals to Sebeta, and the roughness of the road are the factors that resulted in the exacerbation of the hike in the fare of public transport from Woliso to AA and vice versa.

Moreover, weak regulation is one of the main factors that lead to the weak implementation of government policy interventions in the provision and price of public transport. All actors, including the transport authority, workers at the bus station or terminal, and passengers, have relatively common views that there is weak regulation at the frontline of delivery. In this term, Woliso Bus Station is relatively good, and now electronic tickets (see figure 1) are used to strictly regulate public transport fares. Because of such regulation at Woliso Bus Station, there is an artificially created shortage of public transport vehicles, which leads to longer waiting times at the station. Some passengers, because of a loss of hope, decide to choose informal public transport services and pay more than the government tariff. Therefore, it is possible to say that the government's policy intervention through subsidy and tariff in public transport faces a policy earthquake and has failed to be implemented while the government still pays huge public money to subsidize public transport service provision. Moreover, government policy and regulatory intervention failed to balance the interests of private providers of public transport with those of the users. This finding is contradicting the very nature of public transport as a public utility, as identified and indicated by Šipuš, Abramović & Gašparović (2019); Hamacher & Schöbel, 2004; McNabbs (2016) and Schöbel (2007).

Generally, government policy and regulatory intervention have failed to control and regulate the increasing actual or real price of public transport that is informally imposed on public users, particularly in the past two years. Therefore, government policy and regulatory intervention in this case remain hypothetical or nominal in most of the cases of public transport from Woliso to AA and vice versa, as the actual price or fare is the one that is illegally or informally imposed on the users and is more practical than the government tariff.

## Recommendation

At the policy-making level, there is a need for the participation of primary stakeholders, particularly in setting the tariffs for public transport. Moreover, the factors upon which the tariff is designed should be announced and clearly communicated to the concerned stakeholders, especially the providers and users. Undertaking a continuous and strong mechanism of awareness creation is also important to create a harmonious relationship between users, providers, and regulatory bodies and to ensure effective implantation of policy and regulatory intervention in public transport service provision.

Additionally, the interests of the private providers of public transport and the public users should be integrated into the service provision system. As public transport is a public utility, it should not be totally reserved for private providers. To integrate the public interest in this case, the government should take part in the direct delivery of public transport from Woliso to Addis Ababa. The government needs to take part in the direct provision of public transport to enhance the implementation of government intervention and make the transport service more sustainable. Mass transport is also advisable to cope with the problems of artificial shortages and to make public transport more accessible and affordable to low-income users. Particularly publicly owned mass transit is also compatible with the public interest and environmental requirements.

Moreover, the provider claims that the government should either regulate the price of spare parts by adjusting the tariff or include/integrate the increasing price of spare parts in the subsidization schemes of public transport in a balanced manner. In this respect, the government should consider public transport as an economic activity and act accordingly to make the sector sustainable and improve the quality of public transport services. Government should share experience from European countries which provide 40%- 75% subsidy to public transport.

## Future Research Implication

This case study indicates a small portion of the policy and regulatory problems regarding the fare and price that the public transport service delivery system faces by taking a very small case into account. As observed from this case study, there are immense problems in the public transport sector that need deep and broader investigation with the participation of multiple disciplines and multiple stakeholders. Hence, any interested scholars and institutions shall take this case study as an input and make an in-depth as well as broader investigation of the problems and challenges that public transport faces in the case in particular and throughout the country in general.

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# Annexes

## Annex one: Questionnaire to be filled by users

**Addis Ababa University**

**College of Law and Governance Studies, Center for Federalism and Governance Studies**

**Doctor of Philosophy in Federalism and Governance**

Dear respondents,

My name is Tefera Assefa

I am a student of Doctor of Philosophy in federalism and governance and currently conducting research on a title “Transport tariff hiking: The case of public transport fare between AA and Woliso town” as partial fulfillment of the course Public Administration and Policy Design in Federations (FESD821)

Therefore, I humbly request for your participation in this study to fill the questionnaires attached below. Your view is extremely important in this study and I promise that the research results will be used for academic purposes only and will be treated with maximum confidentiality. Hence, you are cordially requested to fill the questionnaire exactly as you feel.

Instruction: Please take a few minutes to tell us what you think about the increasing in transport tariff. There is no need to write your name or any other personal identity. For all questions below, you may tick (√), choose or rank where applicable or give a brief explanation where you feel it is necessary.

1. What do you feel regarding the quality of public transport you use from Woliso to AAand vice versa?

Extremely High High Moderate low extremely low

1. How do you rate the price of public transport from AAto Woliso and vice versa?

Very High High Moderate low very low

1. Is there irregularity in the price you are paying to public transport from AAto Woliso versus Woliso to Addis Ababa?

Yes No

1. If your response to question number 3 is yes, what is the range of price variation you experienced (in birr?

1-10 11-20 21-30 31-40 41-50 >50

1. How do you rate the following factors in terms of their contribution to the variation of price of public transport?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S. No. | Factors | Rating scale | | | | |
| Very high  (5) | High  (4) | Neutral  (3) | Low  (2) | Very low  (1) |
|  | Absence alternative |  |  |  |  |  |
|  | Ability and willingness to pay |  |  |  |  |  |
|  | Time |  |  |  |  |  |
|  | Limited modes of transport |  |  |  |  |  |
|  | Weak Regulation |  |  |  |  |  |
|  | User’s Interest |  |  |  |  |  |

1. Would you please rank (from 1st to 7th) the following factors in terms of their impacts on the transport price variation from Woliso to Addis Ababa?

|  |  |  |
| --- | --- | --- |
| S. No. | Factors | Rank |
|  | Lack of alternative transport |  |
|  | Lack of effective regulations |  |
|  | Increasing the price of fuel |  |
|  | Low resistance from the users |  |
|  | Modes of transport |  |
|  | Time and starting place |  |
|  | Boarding point/Ending point |  |

1. How do you rate the public transport service quality as per the following indicators from Woliso to AA and vice versa against the variation of its price?

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S. No | Indicators | Scale | | | | | | |
| Excellent  (7) | Very good (6) | Good  (5) | Moderate (4) | Bad  (3) | Very bad (2) | Extremely bad (1) |
|  | Availability |  |  |  |  |  |  |  |
|  | Accessibility |  |  |  |  |  |  |  |
|  | Information |  |  |  |  |  |  |  |
|  | Time |  |  |  |  |  |  |  |
|  | Customer care |  |  |  |  |  |  |  |
|  | Comfort |  |  |  |  |  |  |  |
|  | Security |  |  |  |  |  |  |  |
|  | Environmental impact |  |  |  |  |  |  |  |

1. If you have any comment and views that need to be addressed regarding the transport tariff/price from AA to Woliso and vice versa, please provide on the following space.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Annex Two: Interview questions to station/terminal and transport and logistics authority

**Addis Ababa University**

**College of Law and Governance Studies**

**Center for Federalism and Governance Studies**

**Doctor of Philosophy in Federalism and Governance**

I am a student of Doctor of Philosophy in federalism and governance and currently conducting research on a title “Transport tariff hiking: The case of public transport fare between AA and Woliso town” as partial fulfillment of the course Public Administration and Policy Design in Federations (FESD821). Interview questions was designed to ask the Transport Authorities, Bus Stations and Traffic Polices workers regarding the public transport price, regulation, linkage of actors and complaint management mechanisms.

1. What are the causes for the raising operating cost of public transport in general?
2. What about from AA to Woliso and vice versa?
3. Do you think it is profitable for the provider in line with current costs?
4. What is the main cause for the market irregularities and hiking fares of public transport from AA to Woliso and vice versa?
5. What are the roles and responsibilities of regulatory bodies controlling the price of public transport?
6. How about the coordination of different actors in regulation?
7. Have your formal linkage with traffic police and other stations?
8. How do you manage customer complaints?
9. Is there any compliant mechanism for service users that could be easily used?
10. Is there an integrated ticket selling center for implementing integrated fare system?
11. Is there an effective complaint receiving and handling mechanisms from passenger?
12. Do you think that the existing tariff and subsidy provided balances the interese of the private providers and public interest?
13. Generally, what do you think regarding the existing fuel price, spare part price and the existing tariff? Is that profitable for providers of public transport service?

## Annex Three: Interview questions to providers

**Addis Ababa AUniversity**

**College of Law and Governance Studies, Center for Federalism and Governance Studies**

**Doctor of Philosophy in Federalism and Governance**

I am a student of Doctor of Philosophy in federalism and governance and currently conducting research on a title “Transport tariff hiking: the case of public transport fare between AAand Woliso town” as partial fulfillment of the course Public Administration and Policy Design in Federations (FESD821).

1. How do you explain the operating costs of public transport general?
2. What are the causes for the rising cost of public transport?
3. What about from AA to Woliso and vice versa?
4. What do you think about the subsidy that the government provides?
5. Is the subsidy you receive commensurate with the increasing costs of transport provision and tariff that passengers pay?
6. Do you think that public transport is profitable in line with current costs?
7. Generally, what do you think regarding the existing fuel price, spare part price and the existing tariff? Is that profitable for providers of public transport service?

## Annex Four: Table 2: Respondent’s Code

|  |  |  |
| --- | --- | --- |
| S. No. | Respondent’s Code | Explanation |
|  | DR/A/001 | Informants selected from drivers/owners and assistants (Interview was made with both driver and assistant at a time). Totally six (3 drivers and 3 assistants) were contacted. |
|  | DR/A/002 |
|  | DR/A/003 |
|  | WTTA/001 | Two informants selected from staffs of Woliso town Transport Authority |
|  | WTTA/002 |
|  | WTBSW/001 | Two informants selected from Woliso town Bus Station workers |
|  | WTBSW/002 |
|  | AKSMPTT/001 | Three informants from workers of Addis Ketema Small and Medium Public Transport Terminal |
|  | AKSMPTT/002 |
|  | AKSMPTT/003 |
|  | OTA/001 | Five key informants from Oromia Logistics and Transport Authority |
|  | OTA/002 |
|  | OTA/003 |
|  | OTA/004 |
|  | OTA/005 |
|  | PROEQ | Passengers’ responses to open ended questionnaire |

Source: Developed by the author (2023)

## Annex Five: Perception of Respondents to the Factor Affection Price Variation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table 5: Absence of alternative** | | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent | |
| Valid | very low | 4 | 13.3 | 13.3 | 13.3 | |
| Low | 6 | 20.0 | 20.0 | 33.3 | |
| Neutral | 3 | 10.0 | 10.0 | 43.3 | |
| High | 7 | 23.3 | 23.3 | 66.7 | |
| very high | 10 | 33.3 | 33.3 | 100.0 | |
| Total | 30 | 100.0 | 100.0 |  | |
|  |  |  |  |  |  | |
| **Table 6: Ability and willingness to pay** | | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent | |
| Valid | very low | 6 | 20.0 | 20.0 | 20.0 | |
| Low | 9 | 30.0 | 30.0 | 50.0 | |
| Neutral | 5 | 16.7 | 16.7 | 66.7 | |
| High | 5 | 16.7 | 16.7 | 83.3 | |
| very high | 5 | 16.7 | 16.7 | 100.0 | |
| Total | 30 | 100.0 | 100.0 |  | |
|  |  |  |  |  |  | |
| **Table 7: Time of travel** | | | | | | |
|  | | Frequency | Percent | Valid Percent | | Cumulative Percent |
| Valid | very low | 3 | 10.0 | 10.0 | | 10.0 |
| Low | 3 | 10.0 | 10.0 | | 20.0 |
| Neutral | 4 | 13.3 | 13.3 | | 33.3 |
| High | 7 | 23.3 | 23.3 | | 56.7 |
| very high | 13 | 43.3 | 43.3 | | 100.0 |
| Total | 30 | 100.0 | 100.0 | |  |
| **Table 8: Limited modes of transport** | | | | | | |
|  | | Frequency | Percent | Valid Percent | | Cumulative Percent |
| Valid | very low | 3 | 10.0 | 10.0 | | 10.0 |
| Low | 5 | 16.7 | 16.7 | | 26.7 |
| Neutral | 7 | 23.3 | 23.3 | | 50.0 |
| High | 12 | 40.0 | 40.0 | | 90.0 |
| very high | 3 | 10.0 | 10.0 | | 100.0 |
| Total | 30 | 100.0 | 100.0 | |  |
|  |  |  |  |  | |  |
| **Table 9: Weak regulation** | | | | | | |
|  | | Frequency | Percent | Valid Percent | | Cumulative Percent |
| Valid | very low | 1 | 3.3 | 3.3 | | 3.3 |
| Low | 4 | 13.3 | 13.3 | | 16.7 |
| Neutral | 1 | 3.3 | 3.3 | | 20.0 |
| High | 11 | 36.7 | 36.7 | | 56.7 |
| very high | 13 | 43.3 | 43.3 | | 100.0 |
| Total | 30 | 100.0 | 100.0 | |  |
|  |  |  |  |  | |  |
| **Table 10: User’s Interest** | | | | | | |
|  | | Frequency | Percent | Valid Percent | | Cumulative Percent |
| Valid | very low | 4 | 13.3 | 13.3 | | 13.3 |
| Low | 4 | 13.3 | 13.3 | | 26.7 |
| Neutral | 5 | 16.7 | 16.7 | | 43.3 |
| High | 6 | 20.0 | 20.0 | | 63.3 |
| very high | 11 | 36.7 | 36.7 | | 100.0 |
| Total | 30 | 100.0 | 100.0 | |  |

## Annex Six: The rank of factors affecting the price variation based on responses of the respondents

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 11: Lack of alternative transport** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Rank | 1st | 3 | 10.0 | 10.0 | 10.0 |
| 2nd | 4 | 13.3 | 13.3 | 23.3 |
| 3rd | 8 | 26.7 | 26.7 | 50.0 |
| 4th | 4 | 13.3 | 13.3 | 63.3 |
| 5th | 8 | 26.7 | 26.7 | 90.0 |
| 6th | 3 | 10.0 | 10.0 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 12: Lack of effective regulations** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Rank | 1st | 12 | 40.0 | 40.0 | 40.0 |
| 2nd | 9 | 30.0 | 30.0 | 70.0 |
| 3rd | 5 | 16.7 | 16.7 | 86.7 |
| 4th | 1 | 3.3 | 3.3 | 90.0 |
| 5th | 1 | 3.3 | 3.3 | 93.3 |
| 6th | 1 | 3.3 | 3.3 | 96.7 |
| 7th | 1 | 3.3 | 3.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 13: Increasing the price of fuel** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1st | 7 | 23.3 | 23.3 | 23.3 |
| 2nd | 6 | 20.0 | 20.0 | 43.3 |
| 3rd | 6 | 20.0 | 20.0 | 63.3 |
| 4th | 6 | 20.0 | 20.0 | 83.3 |
| 5th | 4 | 13.3 | 13.3 | 96.7 |
| 6th | 1 | 3.3 | 3.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 14: Low resistance from the users** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Rank | 1st | 5 | 16.7 | 16.7 | 16.7 |
| 2nd | 5 | 16.7 | 16.7 | 33.3 |
| 3rd | 7 | 23.3 | 23.3 | 56.7 |
| 4th | 4 | 13.3 | 13.3 | 70.0 |
| 5th | 4 | 13.3 | 13.3 | 83.3 |
| 6th | 3 | 10.0 | 10.0 | 93.3 |
| 7th | 2 | 6.7 | 6.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 15: Modes of transport** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 1st | 1 | 3.3 | 3.3 | 3.3 |
| 2nd | 1 | 3.3 | 3.3 | 6.7 |
| 3rd | 2 | 6.7 | 6.7 | 13.3 |
| 4th | 9 | 30.0 | 30.0 | 43.3 |
| 5th | 6 | 20.0 | 20.0 | 63.3 |
| 6th | 8 | 26.7 | 26.7 | 90.0 |
| 7th | 3 | 10.0 | 10.0 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 16: Time and starting place** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Rank | 1st | 1 | 3.3 | 3.3 | 3.3 |
| 2nd | 3 | 10.0 | 10.0 | 13.3 |
| 3rd | 1 | 3.3 | 3.3 | 16.7 |
| 4th | 6 | 20.0 | 20.0 | 36.7 |
| 5th | 5 | 16.7 | 16.7 | 53.3 |
| 6th | 8 | 26.7 | 26.7 | 80.0 |
| 7th | 6 | 20.0 | 20.0 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 17: Boarding point/Ending point** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Rank | 1st | 1 | 3.3 | 3.3 | 3.3 |
| 2nd | 1 | 3.3 | 3.3 | 6.7 |
| 4th | 3 | 10.0 | 10.0 | 16.7 |
| 5th | 2 | 6.7 | 6.7 | 23.3 |
| 6th | 6 | 20.0 | 20.0 | 43.3 |
| 7th | 17 | 56.7 | 56.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 18: Descriptive Statistics to Rank the Factors (calculated based on the values of each which ranges from 1st rank with the highest 7 point to 7th rank with lowest 1 point)** | | | | | | | | |
|  | | Lack of alternative transport | Lack of effective regulations | Increasing the price of fuel | Low resistance from the users | Modes of transport | Time and starting place | Boarding point/Ending point |
| N | Valid | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 4.3667 | 5.7667 | 5.1000 | 4.5333 | 3.2000 | 3.0333 | 2.0000 |
| Median | | 4.3333a | 6.1429a | 5.1667a | 4.7273a | 3.1333a | 2.7692a | 1.5652a |
| Mode | | 3.00b | 7.00 | 7.00 | 5.00 | 4.00 | 2.00 | 1.00 |
| Std. Deviation | | 1.51960 | 1.54659 | 1.49366 | 1.83328 | 1.44795 | 1.71169 | 1.57568 |
| Variance | | 2.309 | 2.392 | 2.231 | 3.361 | 2.097 | 2.930 | 2.483 |
| Sum | | 131.00 | 173.00 | 153.00 | 136.00 | 96.00 | 91.00 | 60.00 |
| a. Calculated from grouped data. | | | | | | | | |
| b. Multiple modes exist. The smallest value is shown | | | | | | | | |

## Annex Seven: Rating of Public Transport Service Quality Indicators

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 19: Availability** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 2 | 6.7 | 6.7 | 6.7 |
| Good | 5 | 16.7 | 16.7 | 23.3 |
| moderate | 4 | 13.3 | 13.3 | 36.7 |
| Bad | 5 | 16.7 | 16.7 | 53.3 |
| very bad | 10 | 33.3 | 33.3 | 86.7 |
| extremely bad | 4 | 13.3 | 13.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 20: Accessibility** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 2 | 6.7 | 6.7 | 6.7 |
| Good | 6 | 20.0 | 20.0 | 26.7 |
| moderate | 3 | 10.0 | 10.0 | 36.7 |
| Bad | 9 | 30.0 | 30.0 | 66.7 |
| very bad | 8 | 26.7 | 26.7 | 93.3 |
| extremely bad | 2 | 6.7 | 6.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 21: Information** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 2 | 6.7 | 6.7 | 6.7 |
| Good | 3 | 10.0 | 10.0 | 16.7 |
| moderate | 3 | 10.0 | 10.0 | 26.7 |
| Bad | 14 | 46.7 | 46.7 | 73.3 |
| very bad | 4 | 13.3 | 13.3 | 86.7 |
| extremely bad | 4 | 13.3 | 13.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 22: Time** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | Good | 5 | 16.7 | 16.7 | 16.7 |
| moderate | 6 | 20.0 | 20.0 | 36.7 |
| Bad | 7 | 23.3 | 23.3 | 60.0 |
| very bad | 7 | 23.3 | 23.3 | 83.3 |
| extremely bad | 5 | 16.7 | 16.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 23: Customer care** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 1 | 3.3 | 3.3 | 3.3 |
| Good | 2 | 6.7 | 6.7 | 10.0 |
| moderate | 3 | 10.0 | 10.0 | 20.0 |
| Bad | 12 | 40.0 | 40.0 | 60.0 |
| very bad | 7 | 23.3 | 23.3 | 83.3 |
| extremely bad | 5 | 16.7 | 16.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 24: Comfort** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | Good | 1 | 3.3 | 3.3 | 3.3 |
| moderate | 5 | 16.7 | 16.7 | 20.0 |
| Bad | 8 | 26.7 | 26.7 | 46.7 |
| very bad | 15 | 50.0 | 50.0 | 96.7 |
| extremely bad | 1 | 3.3 | 3.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 25: Security** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 1 | 3.3 | 3.3 | 3.3 |
| Good | 4 | 13.3 | 13.3 | 16.7 |
| moderate | 5 | 16.7 | 16.7 | 33.3 |
| Bad | 8 | 26.7 | 26.7 | 60.0 |
| very bad | 8 | 26.7 | 26.7 | 86.7 |
| extremely bad | 4 | 13.3 | 13.3 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 26: Environmental impact** | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Scale | very good | 2 | 6.7 | 6.7 | 6.7 |
| Good | 5 | 16.7 | 16.7 | 23.3 |
| moderate | 6 | 20.0 | 20.0 | 43.3 |
| Bad | 10 | 33.3 | 33.3 | 76.7 |
| very bad | 5 | 16.7 | 16.7 | 93.3 |
| extremely bad | 2 | 6.7 | 6.7 | 100.0 |
| Total | 30 | 100.0 | 100.0 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table 27: Descriptive Statistics** | | | | | |
|  | N | Sum | Mean | Std. Deviation | Variance |
| Environmental impact | 30 | 103.00 | 3.4333 | 1.33089 | 1.771 |
| Accessibility | 30 | 99.00 | 3.3000 | 1.41787 | 2.010 |
| Information | 30 | 93.00 | 3.1000 | 1.34805 | 1.817 |
| Availability | 30 | 92.00 | 3.0667 | 1.52978 | 2.340 |
| Security | 30 | 90.00 | 3.0000 | 1.36458 | 1.862 |
| Time | 30 | 89.00 | 2.9667 | 1.35146 | 1.826 |
| Customer care | 30 | 83.00 | 2.7667 | 1.25075 | 1.564 |
| Comfort | 30 | 80.00 | 2.6667 | .92227 | .851 |
| Valid N (list wise) | 30 |  |  |  |  |

## Annex Eight: the Tariff of Small and Medium Public Transport

### F:\public transport cost\20230816_091107_mfnr.jpgA: Public Transport tariff of Oromia National Regional State Transport Authority

### F:\public transport cost\photo_2023-07-16_13-56-54 (2).jpgB: Public Transport tariff of Woliso town Transport Authority

# Annex Nine: Observation Guidelines

In order to make observation easier, the following guideline were used

|  |  |  |
| --- | --- | --- |
| S. No | Observation guidelines | Records of some observed events |
|  | Availability of Vehicle in bus station/terminal | In most of occasion, there are shortages of vehicles in the station/terminal. Long lines of passengers were noticed in this case because of shortages. In some occasion the *Basharis* are recruiting passengers to load outside the bus station/terminal. The price is brokered by the Basharis for the informal public transport providers. They make this trend their common business daily life and source of money |
|  | The roles of regulatory bodies in public transport system (in station/terminal and on the journey) | Most of time remain silent particularly while loading outside station/terminal (particularly at Woliso town) and while loading with more than government tariff within station/terminal (particularly in Addis Ketema Small and Medium Public Transport Station) |
|  | Waiting time in bus station/terminal | At least 1hr and at most 1:30hr for Isuzu Vans when loading in the bus station/terminal |
|  | Passengers’ response to additional payment more than government tariff | Majority of time, passengers are remaining reluctant for imposition of more than government tariff. Passengers pretend as if they paid government tariff in front of regulatory bodies. Some remain silent for the fear of criticism from fellow passenger and not to get into conflict with driver/assistant |
|  | Loading of outside station/terminal | Very common at Woliso town and common at Addis Ketema Small and Medium Public Transport Terminal |
|  | Travel time | Maximum of 4hr and minimum of 2:30hr (2:30 if the tariff congestion is not strong from Addis Ketema Small and Medium Public Transport Terminal to Sebeta) |

1. The term used by Fredrick W. Taylor to explain the condition under which workers are intentionally reducing the pace of their work productivity (see Trivedi, 2020) In this case, the drivers are intentionally reducing the speed of their car if the passengers are resisting paying more than the government tariff. [↑](#footnote-ref-1)
2. Commonly known Amharic name of Isuzu vans in Ethiopia molded from Isuzu freight vehicle. This mode of transport is relatively strong and sustainable because of their natures and spare parts they use. Moreover, the numbers of the passengers it load make it relatively profitable than the minibuses. [↑](#footnote-ref-2)
3. Personal observation oral discussion with passengers and station workers indicates the high level of passengers from Wolkite town to Woliso bus station which sometimes create shortage. [↑](#footnote-ref-3)