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# Taxation within the Transport Sector: A Ride-hailer and Sharing Economy Perspective

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ABSTRACT: This study explored the implications of taxes on ride hailing services in a developing economy setting and its effect on the activities of drivers who patronize such services. Using thematic analysis, the study analysed interview responses from key participants in the ride hailing services such as the drivers, service operators and vehicle owners based on the sharing economy perspective. The results indicate that (1) in a broader sense the contribution of the ride-hailing service is characterized with some features such as savings in money and time, ease of stress for both drivers and passengers, and also ease of movement; (2) taxes are needful to ensure sustainable governance but these taxes ought to be equitably charged to all actors within the economy and (3) the Vehicle Income Tax is a cause of financial distress to Uber drivers due to its increasing nature. More importantly, the tax has the potential of eroding profits which makes drivers worse off. This new but genre system of transportation is gaining roots and far advancing within the Ghanaian landscape. Thus, policy makers and industry players must focus on its role within the economy and the benefits therefrom. Equally, there must be more policy initiatives to prevent overburdening the final consumer of ride-hailing services with high taxes and prices. It also suggested that, subsequent studies focus on the use of a different methodology within a different or the same setting.

KEYWORDS: Taxation, Sharing economy, Transport sector, Ride-hailing, Informal sector

# I. INTRODUCTION

Literature provides a myriad of definitions for taxation per its role in nation building and development. Conclusively, taxation is construed as an imposition by government at various levels. Therefore, it affects individuals, households, businesses, investors, exporters, and importers, just to mention a few. The payment of tax generates substantial amounts of income and revenue to governments. Thus, tax income continues to be a substantial source of income for the government, and as such, it is an important tool for economic development (Bunn et al., 2020). In a middleincome country like Ghana, the transportation sector plays a crucial role in advancing the country's socioeconomic development goal (Azunre et al., 2021; Gorman et al., 2019). As a result, policymakers explore this avenue, just as others by aligning the tax structure with sector demands as a top priority. In this regard, the tax structure if not effectively suited to specific conditions may impose greater burdens on the tax paying public, thereby harming the final consumer (Armah-Attoh and Awal, 2013; Ting and Gray 2019). Tax structures inextricably link tax policies to the survival of businesses and households. Armah-Attoh and Awal (2013) for instance, contend that tax rules and processes are linked to the commercial activities within a country. Equally, Abd Hamid et al. (2019) document that progressive tax rules and regulations could potentially translate into successful and

financially sound corporate organizations. In recent years, the Ghanaian tax system has experienced some major modifications which included the alignment of all tax collection entities under one umbrella- the Ghana Revenue Authority (GRA) as established by ACT 791. The need for these modifications stems from the plethora of studies on the subject matter and advice from professionals and specialists (Ameyaw et al., 2016; Armah-Attoh & Awal, 2013; Oppong, 2021) with the ultimate goal of eliminating obsolete provisions and streamlining the main ones. The role of the transport sector within an economy cannot be downplayed. More specifically, the commercial taxi sub-sector. Thus, in cities the world all over, taxis have long been one of the most popular modes of transportation (Cetin & Deakin, 2019; Liu et al., 2015; Nutsugbodo et al., 2018). Petrović and Jakšić (2020) assert that to offset the oversupply of taxis, most governments have had to regulate this sub-sector. The reasons for such regulations according to Griffiths et al. (2019) was to ensure stable rates, assure the safety and quality of taxis, and in the process provide drivers with a living salary. The taxi business in Ghana is currently experiencing a serious challenge in the form of technological innovation in ridehailing services (Amoako et al., 2021; Kufuor, 2018). Until the emergence of the ride-hailing services such as Uber and Bolt, taxis in Ghana enjoyed a monopoly without any form of competition. However, sophisticated and technology driven

customers and commuters begun to advocate for a system where smartphone applications or technologies could be deployed to determine fares. Distinguishing between the two transports systems, ride-hailing apps, according to Rahel (2016) do not offer their own cars or operators, but rather work with licensed drivers and systems already in place. Ride-hailing services are sometimes seen as a mediator rather than a transportation company as a result of this difference. Much to the chagrin of the taxi business, this sub-sector has usually been left unregulated. Taxi companies, according to Kufuor (2018) are requesting that officials prohibit ridehailing services or, at the very least, impose tighter restrictions on their operations. In order to widen its tax net, the GRA recently announced policies on roping in Uber drivers to pay taxes to the state (Kufuor, 2018; Mensah, 2019; Ndajiwo, 2020). Uber Ghana charges partner drivers twenty five percent (25%) on all fares for the use of the Uber software. Additionally, the company retains a percentage of the earning of the drivers as Vehicle Income Tax (VIT) to the GRA (Kufuor, 2018). In the light of the above, this study seeks to explore the implications of taxes on Uber drivers per the new VIT policy implemented by the GRA and examine how it will consequently affect the activities of Uber drivers as part of the larger transport business. As the oldest and most popular ride-hailing service provider in the country, this study focuses on Uber drivers to understand the implications of taxes on their income and activities. Aside adding to existing literature on taxation and the transport economy of a developing nation, it will assist industry players and governments to appreciate the effects of taxation within the transport sector. Consequently, it could be an avenue for widening the tax net by tax authorities. The study seeks to answer the following questions: (1) are there some aspects of the ride hailing services that are relevant for tax policy and administration?, (2) are the existing tax policies in the transport sector sufficient for the ride hailing services or they will need new tax policy for some special aspects of their business?, and (3) how will the new Vehicle Income Tax (VIT) policy affect the business of Uber drivers?. The next section reviews literature with a discussion on the sharing economy. This is followed by the methodology and presentation of data. Study findings are then discussed with a conclusion which provides some recommendations.

# II. LITERATURE REVIEW

This section discuses literature on the subject matter under consideration

# A. The Concept Of Taxation Within The Informal Sector

According to Osei-Boateng and Ampratwum (2011), the informal sector is a source of dynamic growth that is only hindered by the state's regulation. This definition is centred on the legal position of the company: whether it is licensed and in accordance with the legislation concerned. Currently, it is this legal definition which is commonly used (Auriol &

Warlters, 2005; Gerxhani, 2004; Joshi et al., 2014). Since the informal sector is a broad one, all past and current administrations of governments face difficult situations in taxing the informal sector. This notwithstanding, governments desperately need to generate more local revenue, due to increasing pressure to meet socioeconomic and infrastructural development needs. The broad informal sector, which remains largely untaxed, is a potential source of the much needed revenue. Thus, taxing the informal economy is a possible source of government revenue, as the informal sector accounts for a significant and growing share of Gross Domestic Product (GDP) in many economies (Elgin & Solis-Garcia, 2011; Schneider & Klinglmair, 2004).

According to Ofori (2009), in 1963, when the Ghana Standard Assessment Act of 1963, Act 205 was passed, the first attempt was made to tax the informal sector (i.e. small companies and self-employed persons). . The standard assessment was a scheme by which individuals and companies were liable to a fixed lump-sum fee, on the basis of the company's business operation. The levies equate to an average income amount that members of a particular profession or community are expected to earn. The major advantage of the program was "the vertical equity enhancement scheme". Despite the benefit however, there were certain drawbacks that hindered the system from achieving its policy goals. The flawed administrative ability of the tax administration did not allow for effective control of the system. Therefore, the much weakened informal sector found the annual payment to be too high, with small informal sector operators who did not actually need certificates to clear them to carry on business activities being very rapidly evading.

The informal sector tax policy therefore moved to normal practice of raising temporary taxes and requesting quarterly payments. A situation which was construed as challenging and non-conformity being encouraged (Osei-Boateng & Ampratwum, 2011). So in 1986, with tax reforms to improve the administrative structures of tax institutions under the Economic Recovery Program (ERP) and Structure Adjustment Program (SAP), a revision of the policy aimed at increasing public revenue required an expansion of the tax base to enable the rate to consistently be small. The pilot scheme was launched by the major transport sector (road transportation) and resulted in the Income Tax Amendment Law of 1987, PNDCL 177, adopted by the legislature. The law stipulated that each person who owns a certain vehicle would pay a tax at a given rate. There were listed two types of tax payments. For one group consisting of taxis and intracity services unique cedi amounts were paid daily, depending on the capacity of the passengers. The second group of longdistance vehicles and freight Lorries accounted for a percentage of their gross receipts.

Notwithstanding a poor tax-administrative capacity in Ghana, the merits of the program improved horizontal equity to the degree that the levy captured small companies and self-

employed individuals who had previously been exempt from taxation and the system increased to some extent the compliance rate of the informal sector. Some demerits of the method are that daily instalments need volumes of receipt books and paperwork for payment documentation, mismatch of the tax revenue caused by the weak administrative system and poor record keeping by associations, since most were illiterate. According to (Carroll, 2011) previous attempts to clean up the tax net in the informal sector have not achieved desired results. Most informal sector businesses were still outside the income tax net, given that majority of these operators receive money from all three primary sources of tax revenue: employment, business, and investment, but they do not pay any tax.

The effort to make the tax-paying sector more open included the implementation of a "tax stamp system". The tax stamp is a standard type of appraisal scheme that imposes a trimester lump sum of revenue (Yin et al., 2016). In comparison to recognizable entity taxation, the tax stamp is administered by the GRA (until now, the Internal Revenue Service) itself where officers have been used in collecting tax. The flaws of previous systems have to some extent now been corrected by the current system (Jnr, 2011). The tax stamp program is effective for informal transport operators as the drivers and/or owners pay for VIT at the start of each quarter.

#### B. Implications Of Taxation In The Informal Sector

Dube and Casale (2016) assert that taxation in the informal economy often raises equity issues. This is because, informal sector operators often have low earnings and taxation of these firms is potentially regressive which increases the risk of fairly manipulative or unethical conduct. Thus taxing the informal sector has been compounded by these concerns. Most tax experts were therefore cautious about concentrating scarce resources on small informal sector businesses in developing countries (Besley & Persson, 2013; Keen, 2013). Instead, the argument for revenue and equity for the expansion of informal taxation is based on more indirect benefits. For instance, low-income taxation of small informal businesses in the short term helps to place firms in the tax net, thus making sure that they are more taxed as they grow over time. With this, a culture of fiscal enforcement is generated and a related claim flips the common stock argument on its head, arguing that formal corporations may find the inability of informal companies to pay taxes "unjust." This can weaken general tax morality and prevent large companies from adhering to tax (Alm et al., 2004; Marandu et al., 2015; Terkper, 2003).

The effects of increased taxation on small businesses' growth are as significant as their immediate impact on profits (Keen, 2013). Most tax specialists are worried that taxation of small businesses will potentially impede growth and that this expense could greatly outweigh the income gain. Per this assertion, firms choose to be informal because some believe formality would hinder growth. But the empirics contend that

formalization—which is essential to entry into the tax net—may potentially have substantial growth benefits or, at least, cannot hinder growth (Kapaz & Kenyon, 2005). Although informality allows businesses to save money, it can also prevent formal businesses from taking advantage of certain opportunities, such as better credit and more opportunities to work with large government and corporate contractual agreements, reduced law enforcement agencies and local authority intimidation, and connect directly to more suitable training programs.

In addition, the state may be more sensitive and accountable to tax-paying entities in an attempt to promote quasi-voluntary tax enforcement (Bates & Donald Lien, 1985; Soest, 2008). Again, if taxes are paid due to a sense of control over government activities (Kanu, 2010; Prichard, 2009), individuals are more likely to make sensitivity and transparency statements. There is some evidence, albeit minimal, that informal taxation can result in improved mobilization and accountability. Ayee and Joshi (2008) and Prichard (2009) show that sector-wide attempts to tax informal business companies in Ghana have resulted in some negotiations with government. In a similar vein, Kanu (2010) found that increased small enterprises' taxation within Ethiopia contributed to public involvement and the government's role in the management of the presumptive tax system was higher. Finally, De Mel et al. (2013) consider that Sri Lanka has encouraged a more expanded confidence in the state even when businesses have not increased productivity, through the formalisation of firms, even with their access to the tax net.

# C. The Sharing Economy

The Sharing Economy is an economic model described as an online community-based activity based on the Peer-to-Peer (P2P) acquisition, provision, or sharing of access to goods and services (Slee, 2017). Communities shared the use of assets for thousands of years, but it became easier for the owners of assets and those who are seeking to use those assets to locate each other because of the advent of the internet and its use of big data (Kotoua et al., 2018; Schlagwein et al., 2020). These processes may also be called the wealth, collective consumption, collaborative economics or peer economy (Martin, 2016). Sun (2018) indicates that most sharing business enterprises retain the common feature of using a mobile app or web site that suits demand and supply, however, this is no good identity alone. For example, traditional companies can use web-based apps or have a strong online presence to interact with customers, but these firms are not usually a part of the sharing economy. Sharing economies allows people and groups to make money from underused properties (Boateng et al., 2019). In such instance idle assets such as parked vehicles and spare rooms can be rented in a sharing economy if they are not in service. It splits physical assets into facilities.

In addition, several studies have applied the word "sharing economy" to the dynamics of this sector in terms of describing the emerging market (Donovan et al., 2016), in comparison with gig economy, peer economy, collaborative economy, on-demand economy, matching economy or access economy (Arthurs, 2017). The sharing economy is the means by which goods and services are distributed, which varies from the traditional model of companies hiring workers and selling products. In the sharing economy, people are said to rent or to "share" items to other individuals such as cars, homes and personal time (Pollio, 2019). The shared economy is a socio-economic environment that shares physical and human resources (Sun, 2018; Widener, 2015). It involves the exchange of goods and services by individuals, production, distribution, trade and consumption by various groups. The activities of the shared economy according to Ranjbari et al. (2018) fall into four main categories: the recirculation, the exchange of resources, the sharing of productive assets focusing on the division of assets and/or space, to allow output and/or consumption, etc.

The sharing economy divisions include: human resources, health, logistics, financial services, household goods, education, transportation and lodging (Carmody & Fortuin, 2019). On-demand platform aggregators, such as Uber, Bolt and Yango, are the most prominent examples in the transport industry in Ghana. Such services allow consumers to connect to an established local driver willing to bring them at rates set by the company to their destination.

# D. Innovation In The Transport Industry (The Evolution Of Ride Hailing Technology)

The sharing of rides in Ghana has come a long way, by what you may call an exciting development ride hailing and ride sharing which are nowadays a lifestyle for those with exposure (Penu, 2018). The growth of the ride-hailing industry in Ghana is for significant. In June 2016, Uber was introduced in Ghana and made a major push (Simmons, 2018). As the first service in the country, it became famous and there was a flurry of activity like all the other new services introduced in the capital of the country. In fact, students began to think of it as the new trend. Penu (2018) indicates that Uber slowly became a convenient option for intown transportation between everyday people since the rates were cheaper as taxi fares in Ghana are quite unpredictable. This is not because they are controlled by sanctioned taxi routes and stations that take account of fluctuations in the world oil price and its effect on our local economy, but rather because they are used for personal transportation and drop off rides that are commonly called "dropping" (Kufuor, 2018; Mihyeon Jeon et al., 2006; Penu, 2018).

In comparison to other countries with taxi rates based on distance and paid per kilometre or miles, Ghana's taxis have no such scheme, irrespective of how you get them. The gap is still dependent, yes, but it was arbitrarily decided between the driver and the customer, based on what everybody can negotiate. And, with a relatively fixed price scheme based largely on distance, Uber was a game changer as a first mover. Fares were not based any more on feeling, who was a smooth speaker, who had more control, whether the trip was in the night and so high prices could be on the basis of the rider's desperation and so on (Simmons et al., 2019). It is based exclusively on traffic, distance and service requirements. In all, it was a fairer way of paying for travel and it was cheaper for all its fairness (Amoako et al., 2021; Boateng et al., 2019). By specifically saying so, for this reason, the majority of people shifted focus to the service plus the convenience element.

Taxify (now Bolt) arrived about a year and a half later. At that time, it was obvious that the ride hailing business just grew. Furthermore, there was an increasing need for alternatives to shape the market and incorporate competition dynamics. In December 2017, Taxify's service was launched in Ghana and joined the mix (Acheampong, 2021). There was little desire to invent or outdo anyone. So Taxify came and offered an alternative. The arrival of Taxify in Ghana posed new dynamics and all the factors responsible for true market operation were immediately involved (Agyeman et al., 2019). Industry, legislation, competitiveness, quality of service, long-term and life value steps, exposure and almost all items that influence decisions by people to choose or stay in a product or service have grown. Likewise, Taxify was launched from a price point which was relatively cheaper than Uber. During its launch Uber had the same impact as a popular choice. People are going to respond better to this service as it was more cost-effective than Uber had except in this situation Taxify didn't have a larger footprint (Amoako et al., 2021). In general, embracing Uber was easier and quicker than a taxi ride (Simmons, 2018). It still made Uber a clear choice for that reason. Taxify was rebranded to Bolt to reflect the whole mission of helping people move about, no matter how (Agyeman et al., 2019).

The ride sharing industry in Ghana has been faced with a surge of challenges. The drivers have been worried for a long time about the attempt by certain drivers to circumvent the payment structure from the ride sharing companies (Acheampong, 2021; Kufuor, 2018; Penu, 2018). At that time, Uber was the leading player and quite the synonym for the ride sharing service, which made Uber drivers prominent. There are drivers who chose to go offline just to stop paying the full service fee on certain journeys. Additionally, almost immediately after, a number of drivers will start and stop trips to get the fares and take the rest of their trips off the road. This is rather a concern for ride sharing companies than drivers, although some riders who are distrustful of drivers do disagree with them (Penu, 2018). Furthermore, the security concerns have become more and more common. This occurred in a variety of waves at various times, but the story is always the same: rides became dangerous because criminals decided to capture suspect passengers, mostly for ransom or ritual murder. Drivers were also annoyed by Uber's

price systems, which the majority find unreasonable (Kufuor, 2018; Penu, 2018). The amount of discount deals on Uber seems to disappoint many drivers. Each time a rider finishes the trip more than a few complain and it turns out they pay less simply because they have an Uber discount.

#### E. The Vehicle Income Tax (VIT) System in Ghana

The income tax is a tax paid on the income of an individual from employment, business and investment (Armah-Attoh & Awal, 2013). Persons such as employees, partnership persons, shareholders and corporate directors and trustees are charged income tax. It is a tax intended for commercial transportation operators. VIT's due dates are January 15, April 15, July 15 and October 15. It is classified according to the cargo capacity and passenger number; on the windscreen of any commercial vehicle, the VIT-sticker must be clear (Jnr, 2011). This tax system extends to trading and hailing companies like Uber and the like that have not been included in this tax bracket (Osei-Boateng & Ampratwum, 2011). The Driver Vehicles and Licensing Authority (DVLA) has quoted the fee as a Ghs 60 for drivers who work on ride-hailing platforms every year with a wake-up call from a range of stakeholders, including commercial taxis that work in competition with these services (Jnr, 2011).

Consequently, all drivers who provide services such as Uber, Yango and Bolt with the aid of digital platforms have now a new Ghs60 payment fee at the end of each year. The DVLA said it had charged the fee as part of the guidelines established in collaboration with the Ghana Police Services, Ministry of Transport, the National Committee on Road Safety and Motor Transport and Traffic (Jnr, 2011; Malik et al., 2021). The Guidelines also included companies that intend to run ride-hailing services in Ghana in the future. Apart from the annual fee, car owners who use a roaming hail network must submit a certificate of registration for verification and authentication at the Digital Transport Centre in the DVLA offices. Furthermore, ride-hailing vehicles must be inspected and accredited every six months according to the new Guidelines.

#### F. The Affordance Theory

Gibson (1979) originally coined the theory to refer to the characteristics of objects that actors in their environment had accessible (Cousins & Robey, 2015; Gibson, 2014) in the form of the relationships between actors and environment they work. Gibson (1979) describes it as action opportunities. The importance of affordance theory in research into Information Systems and the increasing interest of scientists in the use of their concepts call for an integrative view of the topic because the original literature is scattered between different disciplines, and the definition of affordance tends to be different between Information Systems (IS) studies (Pozzi et al., 2014). In Information Systems, an affordance applies to potential interventions for ICT actors (Wang et al., 2018). However, there are drawbacks that can prevent people from achieving their goals when using technology (Tan et al.,

2017). Gibson (1979) says actors in the environment are species that experience and behave. The conditions for such interaction include both the actor's and the environment's properties (Majchrzak & Markus, 2012). Connection is a precondition to an action, but does not mean the existence of a specific activity (Leonardi, 2011).

We can therefore use the technology and overcome the constraints of this technology (Leonardi, 2011). Affordance is empirical because it does not rely on context or perception, but also on its subjective nature because an individual is used as a reference frame. In this context, the affordance of Gibson introduce the idea of mutuality between actors and the setting because the actor is the same thing as the artefact (Majchrzak & Markus, 2012). Access to taxation of ride hailing services, as the relationship between actor capabilities and ICT objects, could also be linked to the sense of travel transactions from these previous concepts. However, constraints can prevent them from achieving their objectives, by using technological challenges.

#### III. METHODOLOGY

The study uses a framework for qualitative case studies to analyse the effect of taxes in the transport industry. A qualitative case study is a form of analysis that helps to investigate a complex phenomenon by defining the different interactive variables (Lichtman, 2013). A case study is a growing social science research tool. It is based on a thorough study of a single person, group or case (Flick, 2018). The target population for this study was Uber drivers in Ghana. The purposive sampling technique was adopted for this study. The purposive sampling approach has two main goals which are (1) ensuring that all of the major stakeholders in the discussion are covered and (2) ensuring that sufficient variety has been included in each of the main criteria in order to investigate the influence of the traits in question (Etikan et al., 2016). The study was carried out with a focus on Uber drivers in the Greater Accra region of Ghana because the ride-hailing service is more concentrated in the capital city of the country. The respondents were chosen intentionally because they fit the study context. The study used interviews as the research instrument. Interviews were semi-structured and consisted of several key issues which helped to define the areas to be explored and also allowed the interviewee to further elaborate so that an idea or a response is more thoroughly pursued (Creswell & Poth, 2017).

Data collected were transcribed, edited and coded and grouped into themes according to the research questions stipulated. As a result, Braun and Clarke's thematic analysis approach was used to examine the data. Thematic analysis is a succinct analytical approach for defining, analysing, and recording knowledge patterns (themes). This minimally arranges and specifies the information in (rich) detail (Braun & Clarke, 2013). The thematic analysis flexibility makes it an appropriate tool for the analysis of interviews and moreover, data will be analysed using thematic analysis since themes

would be generated from data collected (Angeles & Delhi, 2014). A host of ethical issues were considered in undertaking the study. The study also requested the respondents' permission before involving them in the process of data collection and requesting information from them. The respondents were made aware of the study theme and the time for data collection was arranged with them. The respondents were also made aware of the intent of the study and moreover, the collected data from interviews can be treated confidentially and the interview partners remain anonymous.

#### IV.RESULTS AND DISCUSSION

**Demographic Description of Respondents** 

Respondents	Responding	Level of
	Codes	Education
Driver	R1	HND
Service Operator	R2	Diploma
Service Operator	R3	Degree
Driver	R4	Degree
Driver	R5	SHS
Driver	R6	Degree
Driver	R7	Degree
Vehicle Owner	R8	SHS
Vehicle Owner	R9	Degree
Vehicle Owner	R10	HND
Tax Expert	R11	Masters

#### A. Research Question One

In order to answer the first research question, participants were made to respond to questions that provide the general overview on how the ride hailing is characterized and the importance of the ride-hailing system for tax purposes. The key element found with ride hailing service is seen with it greater economic impact on all related parties because it makes use of advanced technologies and made this section of the sector render much better services and makes it more attractive for other potential customers hence, resulting in high patronage of the service.

Advance System Usage: The world economy has experienced a greater good of both technology and transportation advancement. In the array of transportation systems, technological advancement has contributed immensely to the sector making it quite easy and relevant for fiscal purposes and also easy for implementing compliance and traceability of taxable persons. It was indicated by the respondents in agreement that ride-hailing service is a modern approach of transportation and augments the traditional systems of taxi and "trotro", where travellers would have to quay at the respective bus stations or stand on the streets to join these transports.

"...we can see that gradually people are getting to understand how this system works ....I think this is due to a number of people adopting to use smart phones..." (R1). "...in our small way we are also contributing to productivity and economic growth because our services ease movement in the city..." (R3, 4, 1).

It is evident from the responses that, Uber, like the other ride-hailing services (Bolts and Taxify) which uses modern technology, mobile applications and other improved services are much patronized and are doing incredibly well in terms of sales and have also provided an ease of travelling in the cities. In a broader sense the contribution of the ride-hailing service is characterized with features such as: savings in money and time; easing stress level of drivers and passengers; and ease of movement. These findings are consistent with previous studies like Jiang et al. (2018) and Wallsten (2015) who argue that many customers cherish the convenience with the Uber service and provide economic benefits to the government, riders, drivers and the customer alike. A further analysis also supports the good impact of the ride-hailing to the general economy in terms of fiscal contribution and other monetary contributions to individuals who engage in delivering this service (Wallsten, 2015).

High Patronage and Structured Data: In ride-hailing the satisfaction and experience of the customer is keen as it is for every business. Also, the use of the Uber App makes the system of transportation more convenient for customers to demand more of this service and data that is generated from the system is good and very organized to rely on for tax purposes.

The transport support system is advanced method aimed at serving the interest of the customer. This is of greater importance in making the customers feel comfortable in the best way possible. To a larger extent the model for the operative nature of the Uber system is a unique competitive advantage to the firm. The system eases the traffic struggles that could result in time wasting and other resources (fuel and money) for both the passenger and driver alike. This however, makes the system much more attractive to ignite higher patronage and also complement the traditional system and hence is considered to be a relevant feature to generate some tax revenues. This findings contradicts that of Clewlow and Mishra (2017) who opine that an introduction of the new transport system threatens the already struggling transport industry, which then means that an adoption of this new system may not necessarily attract higher patronage. Furthermore, recent data shows that ride-hailing services can serve as both a replacement and a supplement to public transportation networks (Babar & Burtch, 2020; Hall et al., 2018; Young et al., 2020) and this would be a good step for taxation purposes.

Taxation is an important element of sale of the taxable person and contributes to revenue generation of a country. Governments could consider the transport sector for tax purposes based on organised data. Although it is considered part of the informal sector, it could be made formal due to adequate and relevant data kept by the regulator; DVLA. The respondents suggested that drivers and/or the transport owner

could be made to withhold tax and fill tax returns either to the GRA directly or through DVLA.

"...government should take a critical look but very seriously analyse, to examine any tax policy and the many fees imposed on the transport industry. This is basically the work of the GRA to assess the risk of transport operators and its impact on all other road users and the environment at large..." (R11)

In a further assertion they explained that despite the reasonable contribution to the economy, the impact of the fumes to the atmosphere and the general public cannot be overemphasized. They put the health of other road users in an uncomfortable position. They ought to contribute to a greener environment and act accordingly as responsible as possible especially for the lots of carbon emissions to the detriment of the ozone.

"...sincerely, I will say, the impact of road transport on the environment and health of pedestrians is that bad and drivers need to be taxed..." (R2, 3, 6)

"...well as regulator it isn't bad government taxing the incomes of the drivers or vehicle... but let not forget that transport companies are taxed by government..." (R9)

For fiscal policy purposes and responses from the empirical data it seems essential for the government to review the activities of the transportation sector for tax purpose in an assessment of the risk posed to both human and nature alike. Where these taxes could be used in a remedy of the defections as it may result from their operations. The potential restriction as presented by the ride hailing in the case of the Ghana Uber system in its organized nature affords the regulator a chance to start with some taxation. As argued by Hall et al (2018) and Young et al (2020) the potential benefits of the system should be capitalised, so as to help in mitigating the harm caused by the ride-hailing systems. It will be right and vital for the various stakeholders to rethink the fiscal impact of ride-hailing.

Considering data reliability and availability could mindfully implement tax policies to aid revenue generation to support the greener environment and others who may fall victims of the inactions of cars carbon emissions. As indicated by respondents 2, 3, 6 and 9 the great support of vehicle operators ought to act right and be responsible for their inverse contribution to the people.

# B. Research Question Two

In order to answer the second research question, participants were asked to give a general opinion on whether the current taxes are enough to support all its operations. In attempt the following two key themes were developed, first; sustainable governance which is targeted at development of an appropriate approach and strategy to effectively and efficiently estimate the actual cost of the tax burden and the right administration in terms of equitability and other related tax axioms. The second theme was targeted at provision of public and environmental safety which is keening targeted at

eliminating carbon emissions, ensuring road safety, and also aimed at achieving greener sustainable environment.

Sustainable Governance: The respondents suggest that revenue generation through taxation is key to governments and its operations. More taxes are needful to ensure sustainable governance but ought to be equitably charged to all parties concerned. With sustainable governance the target is to develop an appropriate approach and strategy to effectively and efficiently estimate the actual cost of the tax burden and the right administration in terms of equitability and other related tax axioms. Hence, there could be a need to consider other viable taxes different from what they have now, and must make sure the financial situation of these firms are not worsened. And should ensure that the effects of the tax burden is not borne by only the customer however, they should rather cause some improvement in the conditions of all parties involved.

"...to be honest the government needs money to regulate some of the bad practices and even support business also..."
(R 8)

"...it's not true that the current taxes are sufficient, actually paying tax will rather provide us with better chances to engage with the government and ask for its support..." (R2, 10)

Ultimately they should take into consideration green atmosphere technology to limit or eliminate the menace to a zero effect to all concerned parties. In tax administration, imposition of more but equitable taxes are relevant. But certain vehicular tax impositions on importation will limit their use of certain inappropriate cars and will also generate adequate revenue to aid governmental operations and support the activities of transport systems. Taxing the informal economy is a possible source of government revenue, as the informal sector accounts for a significant and growing share of GDP in many economies (Elgin & Solis-Garcia, 2011; Schneider & Klinglmair, 2004).

**Public and Environmental Safety:** Talking about how to deal with inconveniences posted by the ride-hailing service, air pollution in urban cities is likely to put citizens at greater risk of respiratory and other health related diseases. They should be made to contribute to improving the poor air quality caused by them. Erhardt et al. (2019) conclude that despite all the good contribution of transport operators holistically, they should be made to pay for the bad suffered by the populace from fumes and carbon emissions and other road traffic irregularities.

"...our tax will rather provide us with better chances to safe the public, which is coupled with obtaining government support...but in actual sense we are able to contribute to combat the mess that we cause to the environment, especially air pollution..." (R2, 4, 10)

To this effect the transport operators ought to make regular payment through taxes or insurance to mitigate their inaction. Ride-hailing services like the case of Uber have had an increasing effect on car travelling, climate emissions and traffic congestion, in this study the respondents expressed the opinion on the need to work these challenges off.

"...the actual effect of carbon emissions through transport systems and its effect on climate change should be mitigated..." (R 11)

The true cost of Uber and other transport systems is the cost unaccounted for. Undoubtedly, it is hard taking a stock of CO2 emissions to the atmosphere and with this, we do not really pay attention to its cost on the general public especially, the ordinary road user. The respondents, however, seem to support the campaign against the lots of air pollution from transport service operators like Uber to the use of a better transport system. Government should consider right vehicle importation, investments in vehicle manufacturing or show some interest in vehicle assembling firms that could be linked with the 'green atmosphere' by providing financial support to support agenda zero-emission vehicles. These support as decided on will basically have to come from financial commitments that should be targeted on an environmentally sustainable transport system. This will come from taxation.

# C. Research Question Three

In order to answer research question three, participants were asked to tell the effect of any new tax policy on business operations. The one key issue under consideration as indicated by the respondents was the financial stresses that is likely to be faced by sector due to; higher and/or demand dependent on the tax effect, cost on operating profit and lower profit shared.

Financial Stresses: The respondent indicated that taxation affects a wide range of human and organizational activities. One key area that suffers most is the financial health of the organization and also the demand. In a more general scope, the greater the demand of the service, the greater the market share and hence sales returns. Higher demands will provide quality service but in a highly competitive market, the tax burden is easily passed on to the customer when one holds a higher market power. From the respondents, taxes will mean to them an additional cost which will reduce their profitability.

"...yes it's true people have understood the way of the Uber system now but we don't make enough returns, already what generates is distributed across a long chain of providers... should the government decide to charge us with any new taxes then we will be left with no other option than to increase our fares or maybe decide on a check to reduce the way to serve the interest of our customers..." (R 3)

"...we are no different than the other transport service operators like the taxis and the "trotros", and our average returns per month are just little above get, but the income distribution channels is quite tall..." (R 10)

"...for us, we have a little control on our total sale generation per day but we believe any additional charges could be dealt with from the system..." (R6) In the ride-hailing economy there exist a lower economies of scale hence, the drivers and/or vehicle owner and transport service operators are likely to transfer the burden to the customer by charging higher prices or trade off with service quality when taxes are imposed on them personally or the firm.

"...the tax charges alone are an extra cost on industry's profitability, I believe there are other tax provisions like the custom duties that impede the ability of the industry to return much to maintain their financial health..." (R11)

This findings however, is consistent with the prior studies in the airline transport systems by Button et al. (2014) who argued that imposition of more tax on the industry gives a lean way to the taxable person to transfer it to the customers. They further argued that, in the short run, for the firm to maintain some competitive edge it would pass on just a part to be absorbed by the innocent passenger.

"... I am also of the opinion that some old provisions and any attempt to implement or charge any vehicular taxes should be considered critically in order not to violate the reasonable principles of common sense and good fiscal/public policy... also there are some considerations government must take a second look at to relieve the transport industry from some unfair tax burden..." (R11)

This is also made possible when the financial health of a firm is not in good state hence these taxes are transferred to customers as indicated by respondents 3 and 6 to retain the financial position of the firm and likewise. It could also infer from the responses that Uber drivers, and other vehicle owners coupled with the business can make a collaborative effort to turn around the system to charge some prices. Although, the responses indicated that this new but genre system of transportation is gaining roots and far advancing, what they profit from the service is just minimal. They are of the opinion that an introduction of any new taxes will be a big blow on their total returns. These findings are in line with the work of Joshi et al. (2013) who argued that the effect of an increase in taxation on the growth of firms is significant as it impacts their profitability. In a clearer sense and as explained by the respondents, the average returns of the organization is likely to fall below the expected operating profit of the operators. This is mainly made possible with the challenges of higher fuel cost, leading to higher fares and lower demand. The risk of not getting the required rides in effect affects the demand and the earning levels of the operators. This will significantly affect the financial health of the firm.

# CONCLUSIONS

The sharing economy has membership for new sectors which includes healthcare, lodging, handy services, commercial truck aggregation, etc., and the highest rates of adoption are observed in the travel, hospitality and food and beverage industries (Carmody & Fortuin, 2019). Uber, the first ride hailing company that established itself well slowly became a convenient option for in-town transportation between

everyday people since the rates were cheaper and the GPS could navigate through less traffic areas. Taxi fares in Ghana are quite unpredictable and it is not because they are controlled by sanctioned taxi routes and stations that take account of fluctuations in the world oil price and its effect on our local economy, but rather because they are used for personal transportation and drop off rides that are commonly called "dropping" (Mihyeon Jeon et al., 2006). The DVLA introduced a new Ghs60 payment fee at the end of each year for all drivers who provide ride-hailing services with the aid of digital platforms. Also, in order to ensure the right cars are on the road to minimize accidents and other environmental and health factors, ride-hailing vehicles must be inspected and accredited every six months according to the new Guidelines from the DVLA. Therefore, this study revealed that the tax imposed is in the right direction but it should be channelled to proper and efficient use. The study recommends that more policies should be enacted to provide guidelines to the service providers in order not to shift the tax burden to the final consumer of the service and to also provide security for the customers of this service. For fiscal policy purposes and responses from the empirical data it seems essential for the government to review the activities of the transportation sector for tax purpose in an assessment of the risk posed to both human and nature alike. Recommendations made to the drivers and the service providers include the following guidelines from the DVLA: ensure frequent servicing of the cars to make the negative impact on the environment minimal and also structure their pricing system so as not to put the final burden of the tax on the final consumer but distribute it equally. To academia, recommendations is being made to fellow researchers to also use a different methodology for this study as well as using a different regional setting in the country or outside the country. Researchers can also study the security issues regarding such ride hailing services in the country.

#### REFERENCES

- 1. Abd Hamid, N., Ibrahim, N. A., Ibrahim, N. A., Ariffin, N., Taharin, R., & Jelani, F. A. (2019). Factors affecting tax compliance among Malaysian SMEs in e-commerce business. International Journal of Asian Social Science, 9(1), 74–85.
- 2. Acheampong, R. A. (2021). Societal impacts of smart, digital platform mobility services—an empirical study and policy implications of passenger safety and security in ride-hailing. Case Studies on Transport Policy, 9(1), 302–314.
- 3. Agyeman, S., Kwarteng, R. A., & Zurkalnaine, S. (2019). Principal component analysis of driver challenges in the shared taxi market in Ghana. Case Studies on Transport Policy, 7(1), 73–86.
- 4. Alm, J., Martinez-Vazquez, J., & Schneider, F. (2004). 'Sizing 'the Problem of the Hard-to-Tax. Contributions to Economic Analysis, 268, 11–75.

- Ameyaw, B., Oppong, A., Abruquah, L. A., & Ashalley, E. (2016). Informal sector tax compliance issues and the causality nexus between taxation and economic growth: Empirical evidence from Ghana. Modern Economy, 7(12), 1478–1497.
- Amoako, G. K., Dzogbenuku, R. K., & Kumi, D. K. (2021). Service recovery and loyalty of Uber sharing economy: The mediating effect of trust. Research in Transportation Business & Management, 100647.
- Angeles, S. P. L., & Delhi, N. (2014). Matthew B. Miles, A. Michael Huberman, Johnny Saldaña Qualitative Data Analysis. A Methods Sourcebook. 28(4), 485–487.
  - https://doi.org/10.1177/239700221402800402
- 8. Armah-Attoh, D., & Awal, M. (2013). Tax administration in Ghana: perceived institutional challenges. Afrobarometer Briefing Paper, 124(1).
- 9. Arthurs, H. (2017). The false promise of the Sharing Economy. 3rd LLRN Conference, Toronto, Canada, June, 25–27.
- 10. Auriol, E., & Warlters, M. (2005). Taxation base in developing countries. Journal of Public Economics, 89(4), 625–646.
- 11. Ayee, J. R. A., & Joshi, A. (2008). Associational taxation: A pathway into the informal sector?
- Azunre, G. A., Amponsah, O., Takyi, S. A., & Mensah, H. (2021). Informality-sustainable city nexus: The place of informality in advancing sustainable Ghanaian cities. Sustainable Cities and Society, 67, 102707.
- 13. Babar, Y., & Burtch, G. (2020). Examining the heterogeneous impact of ride-hailing services on public transit use. *Information Systems Research*, 31(3), 820–834.
- 14. Bates, R. H., & Donald Lien, D.-H. (1985). A note on taxation, development, and representative government. *Politics & Society*, *14*(1), 53–70.
- 15. Besley, T., & Persson, T. (2013). Taxation and development. In Handbook of public economics (Vol. 5, pp. 51–110). Elsevier.
- Boateng, H., Kosiba, J. P. B., & Okoe, A. F. (2019).
   Determinants of consumers' participation in the sharing economy. International Journal of Contemporary Hospitality Management.
- 17. Braun, V., & Clarke, V. (2013). Successful qualitative research: A practical guide for beginners. Sage.
- Bunn, D., Asen, E., & Enache, C. (2020). Digital taxation around the world. Tax Foundation. Washingtion. URL: Https://Files. Taxfoundation. Org/20200527192056/Digital-Taxation-Around-the-World. Pdf.
- 19. Button, K., Neiva, R., & Yuan, J. (2014). Economic development and the impact of the EU–US Transatlantic Open Skies Air Transport Agreement. Applied Economics Letters, 21(11), 767–770.

- Carmody, P., & Fortuin, A. (2019). "Ride-sharing", virtual capital and impacts on labor in Cape Town, South Africa. African Geographical Review, 38(3), 196–208.
- 21. Carroll, E. (2011). Taxing Ghana's informal sector: the experience of women. Occasional Paper, 7.
- 22. Cetin, T., & Deakin, E. (2019). Regulation of taxis and the rise of ridesharing. Transport Policy, 76, 149–158.
- 23. Clewlow, R. R., & Mishra, G. S. (2017). Disruptive transportation: The adoption, utilization, and impacts of ride-hailing in the United States.
- 24. Cousins, K., & Robey, D. (2015). Managing work-life boundaries with mobile technologies. Information Technology & People.
- 25. Creswell, J. W., & Poth, C. N. (2017). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.
- De Mel, S., McKenzie, D., & Woodruff, C. (2013).
   The demand for, and consequences of, formalization among informal firms in Sri Lanka. American Economic Journal: Applied Economics, 5(2), 122–150.
- 27. Donovan, S. A., Bradley, D. H., & Shimabukuru, J. O. (2016). What does the gig economy mean for workers?
- 28. Dube, G., & Casale, D. (2016). The implementation of informal sector taxation: Evidence from selected African countries. EJTR, 14, 601.
- 29. Elgin, C., & Solis-Garcia, M. (2011). Public trust, taxes and the informal sector. Istanbu: Department of Economics, Bogazici University.
- Erhardt, G. D., Roy, S., Cooper, D., Sana, B., Chen, M., & Castiglione, J. (2019). Do transportation network companies decrease or increase congestion? Science Advances, 5(5), eaau2670.
- 31. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4.
- 32. Flick, U. (2018). Designing qualitative research. Sage.
- 33. Gerxhani, K. (2004). The informal sector in developed and less developed countries: a literature survey. Public Choice, 120(3–4), 267–300.
- 34. Gibson, J. J. (1979). The theory of affordances. The ecological approach to visual perception. Houghton Mifflin Boston, MA.
- 35. Gibson, J. J. (2014). The theory of affordances (1979). In The People, Place, and Space Reader (pp. 90–94). Routledge.
- Gorman, M., Jones, S., & Turner, J. (2019). Older people, mobility and transport in low-and middleincome countries: A review of the research. Sustainability, 11(21), 6157.
- 37. Griffiths, M. A., Perera, B. Y., & Albinsson, P. A. (2019). Contrived surplus and negative externalities in

- the sharing economy. Journal of Marketing Theory and Practice, 27(4), 445–463.
- 38. Hall, J. D., Palsson, C., & Price, J. (2018). Is Uber a substitute or complement for public transit? Journal of Urban Economics, 108, 36–50.
- 39. Jiang, S., Chen, L., Mislove, A., & Wilson, C. (2018). On ridesharing competition and accessibility: Evidence from uber, lyft, and taxi. Proceedings of the 2018 World Wide Web Conference, 863–872.
- 40. Jnr, Y. K. (2011). Vehicle Income Tax (VIT) In Ghana, Challenges and Prospects: A Case Study of Kumasi Metropolis.
- 41. Joshi, A., Prichard, W., & Heady, C. (2013). Taxing the informal economy: Challenges, possibilities and remaining questions. IDS Working Papers, 2013(429), 1–37.
- 42. Joshi, A., Prichard, W., & Heady, C. (2014). Taxing the informal economy: The current state of knowledge and agendas for future research. The Journal of Development Studies, 50(10), 1325–1347.
- Kanu, A. (2010). Taxation, Responsiveness and Accountability in Sub-Saharan Africa. Institute of Development Studies, Brighton: University of Sussex, DPhil.
- 44. Kapaz, E., & Kenyon, T. (2005). The informality trap: tax evasion, finance, and productivity in Brazil.
- 45. Keen, M. (2013). Taxation and development—again. Critical Issues in Taxation and Development, 13–44.
- 46. Kotoua, S., Ilkan, M., & Abdullahi, M. (2018). Destination Marketing and Tourism Entrepreneurship in Ghana. In Emerging Trends in Banking and Finance (pp. 155–180). Springer.
- 47. Kufuor, K. (2018). Uber in Ghana: Markets and Institutions in the Emergence of Ride-Sharing Taxis. LUGLJ: Lancaster University of Ghana Law Journal, 4, 45–69.
- 48. Leonardi, P. M. (2011). When flexible routines meet flexible technologies: Affordance, constraint, and the imbrication of human and material agencies. MIS Quarterly, 147–167.
- 49. Lichtman, M. (2013). Qualitative research for the social sciences. SAGE publications.
- 50. Liu, X., Gong, L., Gong, Y., & Liu, Y. (2015). Revealing travel patterns and city structure with taxi trip data. Journal of Transport Geography, 43, 78–90.
- 51. Majchrzak, A., & Markus, M. L. (2012). Technology affordances and constraints in management information systems (MIS). Encyclopedia of Management Theory, (Ed: E. Kessler), Sage Publications, Forthcoming.
- 52. Malik, A., Ross, I., Abrokwah, E., Conron, H., Kamara, A., & Nuer, D. (2021). A survey of the Ghanaian tax system. IFS Report.
- 53. Marandu, E. E., Mbekomize, C. J., & Ifezue, A. N. (2015). Determinants of tax compliance: A review of

- factors and conceptualizations. International Journal of Economics and Finance, 7(9), 207–218.
- 54. Martin, C. J. (2016). The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecological Economics, 121, 149–159.
- 55. Mensah, S. A. (2019). Antecedents, Outcome and Mediating Role of Consumer Trust in Ridesharing Services in a Developing Economy: A Case of Uber. University of Ghana.
- 56. Mihyeon Jeon, C., Amekudzi, A. A., & Vanegas, J. (2006). Transportation system sustainability issues in high-, middle-, and low-income economies: Case studies from Georgia (US), South Korea, Colombia, and Ghana. Journal of Urban Planning and Development, 132(3), 172–186.
- 57. Ndajiwo, M. (2020). The taxation of the digitalised economy: An African study.
- Nutsugbodo, R. Y., Amenumey, E. K., & Mensah, C. A. (2018). Public transport mode preferences of international tourists in Ghana: Implications for transport planning. Travel Behaviour and Society, 11, 1–8.
- 59. Ofori, E. G. (2009). Taxation of the informal sector in Ghana: a critical examination.
- 60. Oppong, F. (2021). An analysis of the impact of jurisdictional fragmentation on property taxes in Ghana. Journal of Financial Management of Property and Construction.
- 61. Osei-Boateng, C., & Ampratwum, E. (2011). The informal sector in Ghana. Friedrich-Ebert-Stiftung, Ghana Office Accra.
- 62. Penu, O. K. A. (2018). Digital Platforms and the Gig Economy: The Case of Uber in Ghana. University Of Ghana.
- 63. Petrović, S., & Jakšić, T. (2020). Regulation and Competition of Taxi Services. In Uber—Brave New Service or Unfair Competition (pp. 153–180). Springer.
- 64. Pollio, A. (2019). Forefronts of the sharing economy: Uber in Cape Town. International Journal of Urban and Regional Research, 43(4), 760–775.
- 65. Pozzi, G., Pigni, F., & Vitari, C. (2014). Affordance theory in the IS discipline: A review and synthesis of the literature.
- 66. Prichard, W. (2009). The politics of taxation and implications for accountability in Ghana 1981–2008. IDS Working Papers, 2009(330), 1–44.
- 67. Rahel, S. (2016). Economics of the taxi industry: An Uber shake-up. University of Wyoming. Libraries.
- 68. Ranjbari, M., Morales-Alonso, G., & Carrasco-Gallego, R. (2018). Conceptualizing the sharing

- economy through presenting a comprehensive framework. Sustainability, 10(7), 2336.
- Schlagwein, D., Schoder, D., & Spindeldreher, K. (2020). Consolidated, systemic conceptualization, and definition of the "sharing economy." Journal of the Association for Information Science and Technology, 71(7), 817–838.
- 70. Schneider, F., & Klinglmair, R. (2004). Shadow economies around the world: what do we know?
- Simmons, R. O.-B. (2018). Disruptive Digital Technology Services: The Case of Uber Car Ridesharing in Ghana.
- Simmons, R. O.-B., Effah, J., & Boateng, R. (2019).
   Digital Innovation and Taxi Services: The Case of Uru in Ghana.
- 73. Slee, T. (2017). What's yours is mine: Against the sharing economy. Or Books.
- 74. Soest, C. von. (2008). Donor support for tax administration reform in Africa: Experiences in Ghana, Tanzania, Uganda and Zambia (Vol. 2). DEU.
- 75. Sun, Y. (2018). Sharing and riding: How the dockless bike sharing scheme in China shapes the city. Urban Science, 2(3), 68.
- 76. Tan, T. C. F., Tan, B., Lu, A., & Land, L. (2017). Delivering Disruption in an Emergent Access Economy: A Case Study of an E-hailing Platform. CAIS, 41(1), 1–21.
- 77. Terkper, S. (2003). Managing small and medium-size taxpayers in developing economies. Tax Notes International, 29(2), 211–229.
- 78. Ting, A., & Gray, S. J. (2019). The rise of the digital economy: Rethinking the taxation of multinational enterprises. Journal of International Business Studies, 50(9), 1656–1667.
- 79. Wallsten, S. (2015). The competitive effects of the sharing economy: how is Uber changing taxis? Technology Policy Institute, 22, 1–21.
- 80. Wang, H., Wang, J., & Tang, Q. (2018). A review of application of affordance theory in information systems. Journal of Service Science and Management, 11(01), 56.
- 81. Widener, M. N. (2015). Shared spatial regulating in sharing-economy districts. Seton Hall L. Rev., 46, 111.
- 82. Yin, L., Wemah, S., & Abugre, A. S. (2016). Assessment of the Tax Stamp Strategies and Income Tax Compliance among Private Enterprises in Ghana.
- 83. Young, M., Allen, J., & Farber, S. (2020). Measuring when Uber behaves as a substitute or supplement to transit: An examination of travel-time differences in Toronto. Journal of Transport Geography, 82, 102629.