Ethiopian Direct Tax System: The Reform of 2016 and Perception of Business and Employment Income Taxpayers, *Amina Ahmed*[1]

Abstract

The objective of the study was to analyse the Ethiopian direct tax system focusing on the reform of the 2016 and perception of the taxpayers towards the fairness of direct tax system. To achieve the objective of the study descriptive and inferential research design and mixed research approach was adopted. As a data source both primary and secondary data sources were collected. Primary data was gathered from 768 employment and business income taxpayers found in Addis Ababa via a standard questionnaire. Besides, secondary data were gathered from ministry of finance and economic cooperation for the period 2007/08 to 2020/2. The collected data were analyzed by using descriptive data analysis tools. In order to compare the perception and the tax collection performance Mann Whitney U test and paired samples t-test test was conducted respectively. The major findings of the study show that there is a significant variation in the perception of employment and business income taxpayers on the fairness of the Ethiopian direct tax system. The employment income taxpayers didn't believe that the current income tax system of Ethiopia is fair from the different dimensions of fairness while the business income taxpayers agreed to most of the dimensions. The paired samples t-test confirmed that the direct tax revenue shows a significant mean increment after the reform of the 2016 than before at 5% level of significance. Ethiopian direct tax system needs a major revision or reform to enhance the contribution of business income tax revenue, rental income tax revenue and other taxes. In addition, the tax authority is recommended to employ sound administration and controlling system for the collection of domestic indirect tax.

Key word: Ethiopian; perception; direct tax; fairness; tax reform of 2016

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JADS Vol. 9, No. 1, June 2022 Issue; https://doi.org/10.56302/jads.v9i1.8281

Introduction

The government is expected to play allocation, stability, and redistribution roles within a country. To fulfill the expenditure requirements of the public that is to play these all roles the government needs finance from different sources. The provision of public goods is the sole responsibility of the government. To finance these expenditures government can raise funds through the compulsory imposition of taxation in addition to the other possible sources by which government could use to generate the finance (Musgrave, 1989).

Government can use tax and nontax revenues to finance its basic operations. The tax revenue can be classified into direct and indirect tax. The direct tax describes taxes that are levied on income, wealth and capital, whether personal or corporate. Indirect tax on the other hand comprises taxes that are not levied on income or property. It includes VAT, excise duties, import levies and energy and other environmental taxes. The consumers bear the burden of these taxes, in principle, as part of the market price of the goods or services purchased (Sisay, 2018).

The Ethiopian taxation system especially the direct taxes basically imposed on the civil servant as an employment income tax (dully under the control of the government) and the corporates who properly observe the taxation requirements. This is evidenced by the study of Bekana et al., (2014) who said that "it is a common phenomenon, in Ethiopia also, that those that earn a significantly better amount of income do not pay taxes or pay an amount far less than their actual tax liabilities. Giant business houses are allegedly accused of keeping three books of accounts—one for their own business decisions (a genuine one), one for banks (with exaggerated assets and profits), and another for cheating the tax authority (with highly understated assets and profits)—and pay less than they would have otherwise paid".

The Ethiopian tax structure was

dominated by indirect taxation. Dependency on foreign trade taxes would put revenue challenges to domestic resource mobilization in the long term perspective because the expansion of globalization in the form of regional integration and joining multilateral organizations entails more openness of the external sector. Hence due efforts should be exerted to raise tax revenues from direct taxes and domestic indirect taxes to have fiscal sustainability in the long run perspective (Mamo, 2017).

Ethiopia has been reforming its tax system for more than 20 years. Comprehensive tax reforms started in 2002/03 as an integral part of economic reforms. The main objective of the tax reforms was to mobilize tax revenues with a special focus on increasing the share of direct tax contribution to total tax revenues to ensure fiscal sustainability and to reduce dependency on foreign trade tax which is volatile due to free trade agreements and regional integration from long term perspective (Daba & Mishra 2014). Though reforms are undertaken to enhance the contribution of taxation to the economy the tax to GDP ratio as compared to 2005 of 12.5% remained low at 13.4 percent in 2015 after 10 years of efforts (below the sub-Saharan having 18 % share and emerging economies having 20 % share as well the developed economies beyond 30% contribution to the economy).

The proportion of tax revenue to GDP as briefly discussed above is by far less as compared to the average for African countries and even the target proportion planned to be achieved in the year 2020 (17% tax to GDP). Since taxpayers' perceptions of tax fairness influence taxpayers' compliance and tax revenue mobilization, a study on items that influence taxpayers' perceptions of the fairness of a tax system is important. Fairness of the tax system will instill compliant behavior among taxpayers. Understanding taxpayers' motivation and developing tax policies and strategies that can influence compliance will bring more revenue and less administrative cost to the tax authority (Azmi & Perumal, 2008).

Given the above backdrop, the current study will answer the following research questions

- Wɳat is the perception of the taxpayers (employment and business income taxpayers) towards the fairness dimensions (general fairness, exchange with the government, self-interest, special provision, and tax rate structure) of the direct tax system?
- What is the current status of direct tax in Ethiopia taking the reform of 2016 made into consideration?

Review of related literature

There are three functions of state specified: The Allocation function, The Distribution function, and The Stabilization function. To fulfill the expenditure requirements of the public that is to play these all roles the government needs finance from different sources. the provision of public goods is the sole responsibility of the government and to finance these expenditures government can raise funds through the compulsory imposition of taxation on the citizens of a country to support the provision of it in addition to the other possible sources by which government could use to generate the finance (Musgrave, 1989). To raise an adequate amount of tax revenue the government is expected to take into consideration all the workable theories that explicitly discuss taxation. Economists have put forward many ***theories or principles of taxation*** at different times to guide the state as to how justice or equity in taxation can be achieved. The following session reviews the theories of taxation like the benefit theory, the cost of service theory, the ability to pay theory, theory of optimal taxation.

The Benefit Theory

According to this theory, an equitable tax system is one under which each taxpayer contributes in line with the benefit he/she receives from public services. According to this theory, the state should levy taxes on individuals according to the benefit conferred on them. The more benefits a person derives from the activities of the state, the more he should pay to the government as well taxes should be low or zero for those who receive no benefits from the state. Thus a "quid pro quo" is expected to subsist. However, it is impossible to implement precisely due to the difficulty of determining the number of government benefits,

including diffuse benefits such as military protection received by each resident and non-resident taxpayer (Babatunde, Ibukun, & Oyeyemi, 2017).

The Cost-of-Service Theory

The contra theory to the benefit theory is the The „Cost of service" theory of taxation provides that the government should tax the citizens according to the cost of service rendered by it. The tax, an individual should bear, must be equal to the cost of benefit received that is, cost-benefit postulation (Babatunde et.al, 2017).

Ability to Pay Theory

Under this approach, the tax problem is viewed by itself, as opposed to the benefit approach which is dealt with in combination with expenditure, independent of the expenditure determination. For the given total revenue needed, each taxpayer is requested to contribute in line with his/her ability to pay. Leaves the expenditure side of the public sector dangling and thus it is less interesting from the economists' point of view. Yet actual tax policy is largely determined independently of the expenditure side and an equity rule is needed to provide guidance. The ability to pay is widely accepted as this guide though practically measuring the ability to pay of the taxpayer is not easy (Musgrave, 1989).

Neither the cost nor the benefit theory takes into account the redistributive aspect of taxation, because no distinction is made between taxpayers in different economic situations. This approach better meets the redistribution problem but it leaves the provision of public service undetermined. Taxation according to the ability of the taxpayer results in treating people with equal capacity to pay the same (i.e. horizontal equity) and people with greater ability to pay more (vertical equity) (Musgrave, 1989; Mankiw, 2014).

The Equal Sacrifice Theory

The sacrifice theory by Makinya (2000) attempts to determine the burden that rests upon an individual by virtue of his payment of taxes and how much of his or her income remains for purpose of his own subsistence. According to this theory payment of tax is a sacrifice that an individual makes towards the support of the government (Babatunde et.al, 2017)

Theory of Optimal Taxation

The "optimal mix" of taxes, defined as that which minimizes excess burden, may comprise a complex set of taxes and rates. Stiglitz (2000) uses Pareto efficient and social welfare concept in judging the tax structure for being optimal or not 'which says "There exists no alternative tax structure which can make some individual better off without the others worse off". So, in choosing this tax structure optimal taxation system is a set of taxes that maximize social welfare. However, it is clear that different welfare functions could generate different optimal tax structures. For example, social welfare functions with greater concern for equity may apply an optimal tax structure which is more progressive.

Assessment of Tax Performance and Reforms

Peter, Buttrick, & Duncan (2010), conducted a study to assess the Global reform of personal income tax that has been undertaken in the periods 1981-2005: taking 189 countries into consideration. As per this study different reforms have been undertaken in different periods by different

ountries are reviewed. As per this study, low-income countries are not found to alter the tax bracket by taking the effect of inflation into consideration while a significant share of high and -middle-income countries alter tax brackets with no corresponding change in statutory rates adjusting their tax schedules for inflation. The study assumed that without such an adjustment the tax structure is going to be less equitable since the taxpayer is pushed to a higher tax bracket with no accompanying increment in the real income. The study confirmed that there is a slow adjustment of tax brackets in low-income countries but this adjustment is likely to be related to widespread evasion, weak enforcement, and little revenue collected from personal income tax**.**

The study conducted by Claus, (2007) on Tax Policy Reform and Economic Performance in New Zealand shows that taxation can have important economic effects. The paper develops a stylized model

for New Zealand to evaluate the effects of reducing higher-income tax rates. A reduction in higher-income tax rates would improve New Zealand's long-run economic performance if it were financed by a decline in (non-productive) government spending and/or increases in revenue from other less distortionary taxes. A reduction in higher-income tax rates would have distributive effects but would not undermine the overall distributive character of the tax system. Higher-income taxpayers would continue to pay a substantially larger proportion of the tax burden.

The study of Daba & Mishra, (2014) covers the period of 1974/75 to 1912/13 (39 years). In addition, the comparison has been made between pre and post-tax reforms to compare tax system flexibility in terms of raising tax revenues during the EPRDF regime. The period after 2002/03 was considered a post-comprehensive tax reforms years. The result shows that the comparison of the two governments' differentcategories of tax ratios shows a slight increment from an average of 3.77 percent to 9.95 during EPRDF period. Comparing pre and post-tax reforms during the period 1991/92 to 2012/13 the ratios of different category tax revenues show insignificant change for post-comprehensive tax reform period. Comparing direct versus indirect tax categories, direct tax shows the tendency of declining contrary to the comprehensive tax reform's main objective which gave due attention to increasing the share of the direct tax to total revenues.

Taxpayers' Perception of the Taxation System

Blaufus et.al, (2015) studied to assess the Perception of income tax rates in German. In this study, subjects are asked to estimate how high their tax burden is and to give their opinion if, or to what extent, they would consider this perceived tax rate as fair. The findings of the study show that the perceived income tax rates significantly deviate from the objective tax rates for the majority of taxpayers. The degree of misperception can be partly explained by the individual's level of education, income, and whether the individual included social security contribution in their income tax rate estimation. Comparing the perceived tax rate with the tax rate that is regarded as fair, they find that the individual's level of education and age influence their estimate.

The other study conducted by Benk et.al (2012) in Turkey assesses the perception of tax fairness from the perspective of the tax professionals' study with the aim to investigate whether the dimensions of tax fairness exist in Turkey. A survey questionnaire on tax fairness developed by Gilligan and Richardson was administered to a sample of 180 tax professionals (Certified Public Accountants and Sworn-in Certified Public Accountants). Factor analysis and reliability analysis identify six robust tax fairness dimensions. Namely general fairness, middle- income earners' tax share and tax burden, exchange with the government, tax rate structure, special provisions, tax system equality and inequality.

The area of taxation is rich in theories and the practice in implementation while designing policies and introducing reforms resulted in a difference in the perception of the taxpayers over the appropriateness and fairness of the system. The current study aimed at investigating the perception of business and employment income taxpayers towards the fairness of the direct tax system of Ethiopia. Since as it has been shown in the literature review there are limited studies conducted in the area while the tax collection performance of Ethiopia in particular and the developing countries, in general, is limited. For this, the perception of the taxpayers towards the fairness of the tax system contributes to the level of tax compliance of the taxpayers. In addition to this evaluating the effect of the reform made to the income tax also deserves an investigation to see if it results in significant change and achieves the objective of the reform (that is enhancing the total tax revenue collection and specifically improving the level of domestic tax collection). Since little is known about the contribution of the reform.

Research Methodology

Research design and approach:
To achieve the objective of the study is to assess the existing direct tax system and the perception of the taxpayers towards the same descriptive and inferential research design and mixed research approach was adopted as per the nature of the data that are gathered to achieve the objectives of the study.

Data Source and Methods of Data Collection

Both primary and secondary data sources were the main sources of data. The primary data was collected from the employment and business income taxpayers via a questionnaire. The questionnaire is developed by Gilligan and Richardson (2005) and used again by (Azmi, & Perumal, 2008) as well as Benk et.al, (2012) which uses five dimensions of fairness. While secondary data from 2007/08 to 2020/21 were gathered regarding all the components of direct taxes from MoFEC.

Sampling Design
The employment income taxpayers and business income taxpayers (category 'A' taxpayers) were the population of the study. The business and employment income taxpayers were selected purposively since the majority of the direct tax revenue is collected from these taxpayers. From this using the sample size determination formula for an unknown number of population, an equal amount (384) of sample size from the category 'A' business taxpayers and employees of public universities found in Addis Ababa was taken as a sample size. Then a convenient sampling (based on the willingness and availability of the respondents) technique was applied. As a study area, Addis Ababa is purposively selected (considering the homogeneity nature of the respondents and convenience for the researcher).

Method of Data Analysis
To analyze the data collected from both primary and secondary data sources different data analysis tools were used. In order to compare the perception of the taxpayers based on the type of tax paid the Mann Whitney U test was conducted since Mann Whitney U is appropriate for ordered (liker scale questions) data. While to compare the change in the tax revenue before and after the reform of the paired samples t-test was conducted. Paired sample t-test is much more appropriate for continuous data to compare before and after data.

Validity and Reliability
To maintain the validity standard questionnaire which was developed by Gilligan and Richardson (2005) and repeatedly used by different researchers were used. The secondary data were collected from official data sources (MoFEC). In addition to this to conduct the paired samples t-test, normality assumption of the difference and original observation were conducted. Data analysis, presentation, and discussion

To achieve the first objective of the study, to assess the perception of business and personal income taxpayers towards the dimensions of fairness of Ethiopian direct tax, 768 questionnaires were distributed Out of this 698 questionnaires were properly filled and used for the analysis which constitutes a 91% response rate.

Results and Dissuasion

BackgroundInformation of Respondents

Among the 698 properly filled questionnaires; 357 (51%) were business income taxpayers and 341 (49%) employment income taxpayers. In terms of gender 475 (68%) were men while 221 participants were women taxpayers. 56% of the respondents are found in the age bracket of 31-40 years while most (46%) of the respondents hold a first degree followed by masters holder and Ph.D. holders. Implying that the questionnaires are responded to by on average both types of gender, productive age brackets as well-educated participants that can contribute to the reliability and representatives of the data obtained. As per the different dimensions of fairness developed by Gilligan and Richardson (2005) and used again by Benk et.al, (2012) and other scholars in different parts of the world; in this study, an effort was made to assess the perception of the taxpayers towards the five dimensions of tax fairness.

These dimensions are general fairness; Exchange with the Government; Special Provisions, Tax-Rate Structure, and self-interest.

General Fairness Dimension

The first question to assess the perception of the taxpayers toward the general fairness of Ethiopian direct tax was to select the level of agreement to 'For the average taxpayer, I think that the income-tax system is fair'. As shown in the table below, 28% of business income taxpayers and 76% of employment income taxpayers don't believe that on the average taxpayer, the income tax system is fair. While 62% of business income taxpayers and 20% of employment income taxpayers agree that the income tax system is fair for the average taxpayers.

The **second** question raised was; for me personally, I believe that the income tax system is fair. Accordingly, 34% of the business income taxpayers and 80% of the employment income taxpayers didn't agree. While 60% of business income taxpayers and 20% of employment income taxpayers agree that to the above statement.

The **third** question is 'Generally, I believe that the manner in which the income-tax burden is distributed across taxpayers is fair'. Accordingly, 31% of the business income taxpayers and 85% of the employment income taxpayers didn't agree that the manner by which the income tax burden is distributed across taxpayers is fair, while 54% of the business income taxpayers and 6% of the employment income taxpayers didn't agree.

The **fourth** question raised to assess the perception of the direct taxpayers towards the general fairness of the direct tax system is to express the level of agreement to the question 'I believe that everyone pays their fair share of income tax under the current income tax system'. As depicted in the table below, 35% of business income taxpayers and 74% of the employment income taxpayers didn't agree with the above statement while 54% of the business income taxpayers and 15% of the employment income taxpayers believe that every taxpayer pays the fair share of income tax under the current direct tax system in Ethiopia.

The **fifth question** asked to assess the perception of the taxpayers about the general fairness of the Ethiopian direct tax was to show the level of agreement to the question: 'the way employment income tax (business income tax) calculated (example: the tax rate applied, the tax bracket used, deductions provided) is fair'. As shown in the table below 37% of the business income taxpayers and 70% of the employment income taxpayers didn't agree of the fairness of the way income tax is calculated while 57% of the business income taxpayers and 19% of the employment income taxpayers agree on the fairness of the way income tax is calculated.

Exchange with the Government

The second dimension of fairness of taxation is the exchange with the government. To assess the perception of the taxpayers with this dimension of fairness three questions were raised.

Table 3: Perception of The Employment and Business Tax Payers on Exchange with Government Dimension of Fairness

		Type of tax you pay			
		business income tax		employment income tax	
		Count	Column N %	Count	Column N %
I get fair value for my income-tax payments in terms of benefits received from the government example, education, medical, and infrastructure.....	strongly disagree	35	9.8%	104	30.5%
	Disagree	37	10.4%	99	29.0%
	slightly disagree	43	12.0%	42	12.3%
	don't know	54	15.1%	16	4.7%
	slightly agree	79	22.1%	44	12.9%
	Agree	72	20.2%	29	8.5%
	strongly agree	34	9.5%	7	2.1%
	99	3	0.8%	0	0.0%
The income taxes that I have to pay are unreasonably high considering the benefits provided by government.	strongly disagree	19	5.3%	18	5.3%
	Disagree	36	10.1%	45	13.2%
	slightly disagree	36	10.1%	45	13.2%
	don't know	83	23.2%	17	5.0%
	slightly agree	83	23.2%	61	17.9%
	Agree	67	18.8%	95	27.9%
	strongly agree	33	9.2%	60	17.6%
The benefits I received from the government in exchange for my income-tax payments are reasonable.	strongly disagree	27	7.6%	67	19.6%
	Disagree	55	15.4%	122	35.8%
	slightly disagree	45	12.6%	50	14.7%
	don't know	45	12.6%	21	6.2%
	slightly agree	86	24.1%	40	11.7%
	Agree	65	18.2%	37	10.9%
	strongly agree	34	9.5%	4	1.2%

Source: Questionnaire, 2022

The **first question** used to assess the perception of the taxpayers with this dimension is 'I get fair value for my income- tax payments in terms of benefits received from the government example, education, medical, and infrastructure…'. As depicted in the table below 32% of business income taxpayers and 72% of the employment income taxpayers didn't agree that they are getting fair value from the income tax payments in terms of the benefits received from the government

like education, medical, and infrastructure while 53% of business income taxpayers and 23% of the employment income taxpayers agree that they are getting fair benefit for the income tax paid.

The **second** question asked to assess the perception of the taxpayers from the dimension of exchange with the government was to show the level of agreement to 'the income taxes that I have to pay are unreasonably high considering the benefits provided by government'. As depicted in the table below, 25% of business income taxpayers and 32% of employment income taxpayers didn't agree while 51% of business income taxpayers and 63% of employment income taxpayers agree that the income tax paid is unreasonably high considering the benefits provided by the government.

The third question used to assess the perception of the taxpayers towards the exchange with the government dimension of direct tax fairness is 'the benefits I received from the government in exchange for my income-tax payments are reasonable'. As shown in the table below, 35% of business income taxpayers and 70 % of the employment income taxpayers didn't agree that they are getting reasonable benefits from the government in line with the amount of income tax paid while 52% of the business income taxpayers and 24% of the employment income taxpayers agree that they are getting reasonable benefit from the government in line with the amount of income tax paid.

\Special Provisions

The third dimension of fairness of direct taxation is a special provision. To assess the perception of the direct taxpayers two questions were asked that can reflect the perception of the special provisions of the direct tax of the taxpayers.

The **first question** was 'Some legal tax deductions are not fair because only the wealthy (for example large business income tax payers, rental income taxpayers) are in a position to use them'. As depicted below in

Table 4: Perception of the Employment and Business Tax Payers on Special Provision Dimension of Fairness

			Type of Tax You Pay			
			business income tax		employment income tax	
			Count	Column N %	Count	Column N %
1.	Some legal tax deductions are not fair because only the wealthy (example: large business income tax payers, rental income tax payers,.....) are in a position to use them.	strongly disagree	38	10.6%	0	0.0%
		Disagree	19	5.3%	45	13.2%
		slightly disagree	55	15.4%	29	8.5%
		don't know	62	17.4%	66	19.4%
		slightly agree	77	21.6%	40	11.7%
		Agree	70	19.6%	135	39.6%
		strongly agree	36	10.1%	26	7.6%
2.	Compared to the amount paid by more wealthy taxpayers, I pay more than fair share of income taxes.	strongly disagree	21	5.9%	23	6.7%
		Disagree	29	8.2%	16	4.7%
		slightly disagree	64	18.0%	13	3.8%
		don't know	86	24.2%	34	10.0%
		slightly agree	62	17.5%	35	10.3%
		Agree	57	16.1%	122	35.8%
		strongly agree	35	9.9%	98	28.7%
		99	1	0.3%	0	0.0%

Source: Questionnaire, 2022

the table below, 31% of business income taxpayers and 21% of employment income taxpayers didn't agree while 69% of the business and 79% of the employment income taxpayers agree that some of the tax deductions are not fair because only the wealthy are in a position to use them.

The second question used to assess the perception of the taxpayers to the special provisions is 'Compared to the amount paid by more wealthy taxpayers, I pay more than a fair share of income taxes'. As shown below, 32% of business income taxpayers and 15% of employment income taxpayers didn't agree while 44% of business income taxpayers and 75% of employment income taxpayers believe that they are paying more than the fair share of direct tax compared to more wealthy taxpayers.

Tax-Rate Structure

The fourth dimension of tax fairness is the perception of taxpayers toward the tax structure of the direct tax system. Four questions were asked of the respondents that could help assess their perception of the tax rate structure. The table below summarizes the response of both the employment and business income taxpayers.

The first question raised was about the perception of taxpayers on the level of agreement with the statement**: '**High-income earners have a greater ability to pay income taxes, so it is fair that they should pay a higher rate than low-income earners'. As shown below, 30% of business income taxpayers and 17% of the employment income taxpayers didn't agree while 58% of business income taxpayers and 82% of employment income taxpayers agree that

high-income earners have a greater ability to pay income taxes, so it is fair that they should

Table 5: Perception of The Employment and Business Tax Payers on Tax Rate Structure Dimension of Fairness

			Type of tax you pay: business income tax Count	business income tax Column N %	employment income tax Count	employment income tax Column N %
4.	High-income earners have a greater ability to pay income taxes, so it is fair that they should pay a higher rate of than low-income earners.	strongly disagree	24	6.7%	4	1.2%
		Disagree	48	13.4%	17	5.0%
		slightly disagree	36	10.1%	40	11.7%
		don't know	45	12.6%	21	6.2%
		slightly agree	96	26.9%	47	13.8%
		Agree	65	18.2%	166	48.7%
		strongly agree	43	12.0%	46	13.5%
5.	It is fair that high-income earners pay proportionately more tax than low-income earners.	strongly disagree	30	8.4%	18	5.3%
		Disagree	32	9.0%	39	11.4%
		slightly disagree	47	13.2%	40	11.7%
		don't know	39	10.9%	19	5.6%
		slightly agree	73	20.4%	39	11.4%
		Agree	94	26.3%	154	45.2%
		strongly agree	42	11.8%	32	9.4%
6.	A fair tax rate should be the same for everyone, regardless of their income level.	strongly disagree	20	5.6%	104	30.5%
		Disagree	41	11.5%	120	35.2%
		slightly disagree	67	18.8%	33	9.7%
		don't know	51	14.3%	11	3.2%
		slightly agree	60	16.8%	3	0.9%
		Agree	93	26.1%	53	15.5%
		strongly agree	22	6.2%	17	5.0%
		99	3	0.8%	0	0.0%
7.	It is fair for individuals with similar amounts of income to pay a similar amount of income tax	strongly disagree	45	12.6%	15	4.4%
		Disagree	22	6.2%	34	10.0%
		slightly disagree	38	10.6%	17	5.0%
		don't know	44	12.3%	27	7.9%
		slightly agree	78	21.8%	37	10.9%
		Agree	106	29.7%	149	43.7%
		strongly agree	24	6.7%	62	18.2%

Source: Questionnaire, 2022

pay a higher rate of than low-income earners.

The second statement to assess the perception of income taxpayers on the tax rate structure dimension is **'**It is fair that high-income earners pay proportionately more tax than low-income earners'. As depicted below, 30% of business income taxpayers and 28% of the employment income taxpayers didn't agree while 59% of business income taxpayers and 66% of employment income taxpayers agree to the statement 'It is fair that high-income earners pay proportionately more tax than low-income earners'.

The third statement used to assess the perception of the taxpayers towards the tax structure was 'A fair tax rate should be the same for everyone, regardless of their income level'. As shown below 36% of business income taxpayers and 75% of employment income taxpayers didn't agree while 50% of the business income taxpayers and 22% of the employment income taxpayers agree that a fair tax rate should be the same for everyone, regardless of the level of income.

The fourth statement used to assess the perception of the taxpayers to the tax rate structure is 'It is fair for individuals with similar amounts of income to pay a similar amount of income tax'. As shown below, 30% of the business income taxpayers and 20% of the employment income taxpayers didn't agree while 59% of the business income taxpayers and 73% of the employment income taxpayers do agree that 'It is fair for individuals with similar amounts of income to pay a similar amount of income tax.

Self Interest

To assess the perception of the taxpayers towards the self-interest dimension of fairness of taxation the following 3 questions were asked. The answers of the business and employment taxpayers were summarized in the following table. The **first** question used to assess the perception of direct taxpayers towards self-interest is **'I** believe that the income-tax system is the fairest kind of system that the government could use to collect revenue'. Accordingly, 27% of the

Table 6: Perception of The Employment and Business Tax Payers on Self-Interest Dimension of Fairness

			Type of Tax You Pay: business income tax Count	business income tax Column N %	employment income tax Count	employment income tax Column N %
1.	I believe that the income-tax system is the fairest kind of system that the government could use to collect revenue.	strongly disagree	30	8.5%	61	17.9%
		Disagree	19	5.4%	73	21.4%
		slightly disagree	47	13.3%	48	14.1%
		don't know	45	12.7%	27	7.9%
		slightly agree	88	24.9%	83	24.3%
		Agree	95	26.9%	36	10.6%
		strongly agree	29	8.2%	13	3.8%
2.	Current income tax laws require me to pay more than my fair share of income taxes.	strongly disagree	21	5.9%	41	12.0%
		Disagree	24	6.7%	45	13.2%
		slightly disagree	77	21.6%	10	2.9%
		don't know	28	7.8%	28	8.2%
		slightly agree	94	26.3%	31	9.1%
		Agree	83	23.2%	92	27.0%
		strongly agree	30	8.4%	94	27.6%
3.	Compared to other taxpayers of direct tax, I pay less than my fair share of income taxes.	strongly disagree	50	14.0%	116	34.0%
		Disagree	60	16.8%	174	51.0%
		slightly disagree	73	20.4%	10	2.9%
		don't know	41	11.5%	17	5.0%
		slightly agree	60	16.8%	7	2.1%
		Agree	48	13.4%	10	2.9%
		strongly agree	25	7.0%	7	2.1%

Source: Questionnaire, 2022

business income taxpayers and 53% of the employment income taxpayers didn't believe that the income tax system is the fairest kind of tax the government can use to collect revenue. While 60% of the business income taxpayers and 39% of employment income taxpayers didn't believe.

The **second** question used to assess the perception of taxpayers towards the self-interest dimension of fairness of taxation is to express the agreement level to the question 'Current income tax laws require me to pay more than my fair share of income taxes'. As depicted in the table below, 34% of business income taxpayers and 28% of the employment income taxpayers didn't agree while 58% of business income taxpayers and 64% of the employment

income taxpayers agree that the current income tax laws requires them to pay more than the fair share of the income tax. This shows that the majority of taxpayers are believe that they are paying tax beyond their ability.

The **third question** used to assess the self-interest of the taxpayers was 'Compared to other taxpayers of direct tax, I pay less than my fair share of income taxes'. Accordingly, 51% of business income taxpayers and 88% of the employment income taxpayers didn't agree while 37% of the business income taxpayers and 7% of the employment income taxpayers believe that they are paying less than their fair share of income tax compared to the other direct taxpayers. As a summary, the median of the five dimensions of fairness was calculated, and compared the level of agreement using the Mann- Whitney U test. Regarding the **general fairness** of the direct tax system, the business income taxpayers highly and significantly agree with a mean

Table 7: Summary of the Dimensions of Fairness Vis A Vis the Type of Tax Payers

Ranks

	Type of tax you pay	N	Mean Rank	Sum of Ranks
General fairness	business income tax	357	452.15	161416.00
	employment income tax	341	242.04	82535.00
	Total	698		
Exchange with gov't	business income tax	357	454.51	162259.50
	employment income tax	341	239.56	81691.50
	Total	698		
Special provisions	business income tax	357	292.84	104543.50
	employment income tax	341	405.82	139407.50
	Total	698		
Tax rate structure	business income tax	357	306.83	109538.50
	employment income tax	341	394.17	134412.50
	Total	698		
Self interest	business income tax	357	439.03	156733.00
	employment income tax	341	255.77	87218.00
	Total	698		

Source: questionnaire, 2022

Test Statistics[a]

	General fairness	Exchange with gov't	Special provision	Tax rate structure	Self interest
Mann-Whitney U	24224.000	23380.500	40640.500	45635.500	28907.000
Wilcoxon W	82535.000	81691.500	104543.500	109538.500	87218.000
Z	-13.997	-14.299	-7.645	-5.915	-12.233
Asymp. Sig. (2-tailed)	.000	.000	.000	.000	.000

a. Grouping Variable: Type of tax you pay

rank of 452.15 then the employment incometaxpayers with a mean rank of 242.04 at a 1% level of significance.

Regarding the **exchange with the government** the business income tax payers highly agree with mean rank of\454.51 than the employment income tax payers with the mean rank of 239.56 at a 1 % level of significance.

Regarding the third dimension of fairness which is the **special provision**, the employment income taxpayers highly agree with the mean rank of 408.82 on the special provisions provided in the direct tax system is not considering the poor and the employment income taxpayers rather it is targeted the rich and the business taxpayers than the business income taxpayers with a mean rank of 292.84. The difference in perception is significant at a 1% level of significance.

Regarding the **tax rate structure**, which is the 4th dimension of fairness, still there is a significant (at a 1% level of significance) difference between employment and business income taxpayers. The employment income taxpayers highly agree on the tax rate structure of direct tax with a mean rank of 394.17 that the business income taxpayers with a mean rank of 306.83.

Regarding the last dimension of fairness, self-interest, still there is a significant variation between the taxpayers at a 1% level of significance. The business income taxpayers highly agree with the mean rank of 439.03 on the questions raised to assess the self-interest of the taxpayers that the employment income taxpayers with a mean rank of 255.77.

The assessment of the taxpayers about the attributes of direct tax which includes High-income earners have a greater ability to pay income taxes, so it is fair that they should pay a higher rate than low-income earners'; 'It is fair that high-income earners pay proportionately more tax than low-income earners'; 'A fair tax rate should be the same for everyone, regardless of their income level'; 'It is fair for individuals with similar amounts of income to pay a similar amount of income tax'. These statements were highly agreed upon by employment income taxpayers in line to the theories of taxation than the business income taxpayers. This shows that employment income taxpayers do have awareness about the attributes of a fair tax system. Though the employment income taxpayers agreed upon the tax rate structure dimension of the direct tax system, they strongly disagree and have a significant

difference in the remaining dimensions of fairness of the Ethiopian direct tax system.

From the general fairness dimension perspective, the employment income taxpayers significantly didn't agree that the current income tax system is more fair than the business income taxpayers. In addition to this, the employment income taxpayers also perceive that they are not getting a fair share of benefits from the government in line with the tax paid. In addition, employment income taxpayers believe that the special provisions and deductions incorporated in the income tax law are not targeting the employment income taxpayers. Rather these deductions and exemptions are targeting the rich as well as the business income taxpayers. As a result of the above perceptions generally, the employment income taxpayers didn't believe that the current income tax system is not a fair system to collect tax revenue.

These differences in perception may result from different sources. the Ethiopian taxation system especially the direct taxes are basically imposed on the civil servant as an employment income tax (dully under the control of the government) and the corporates who properly observe the taxation requirements. This is evidenced by the study of Bekana, Bayissa, & Medihin, (2014) who said that "it is a common phenomenon, in Ethiopia also, that those that earn a significantly better amount of income do not pay taxes or pay an amount far less than their actual tax liabilities. Giant business houses are allegedly accused of keeping three books of accounts—one for their own business decisions (a genuine one), one for banks(with exaggerated assets and profits), and another for cheating the tax authority (with highly understated assets and profits)—and pay less than they would have paid.".

Ethiopian Direct Tax System and the Reform of 2016

In order to achieve the second specific objective of the study: i.e. To assess the current status of direct tax in Ethiopia taking the reforms made into consideration and in comparison with indirect tax secondary data was collected from the Ministry of Finance and economic cooperation. Time series data from 2007/08 up to 2020/21 was collected about the total revenue; direct tax revenues and components of direct tax. The following section will discuss these in detail.

Comparative Analysis of Tax Revenue and Components vis-a-vis the Reform of 2016

The trend analysis, as depicted in Figure 1 below, shows that the overall tax revenue of Ethiopia from the year 2007/08 to 2020/21 shows an increment from time to time with a mean value of 160776.6 (ETB

Table 8: Descriptive Statistics

	Total tax	Direct Tax	Personal income	Business income	Rental income
Mean	160776.6	64050.25	22518.25	32268.36	1156.768
Maximum	388763.5	173965.5	66032.05	87012.64	3315.515
Minimum	23800.68	7015.290	2667.490	3040.320	54.32000
Std. Dev.	112572.2	50986.89	19482.92	25237.76	1022.697
Skewness	0.500740	0.726411	0.883443	0.700039	0.705716
Kurtosis	2.260042	2.540750	2.786686	2.599769	2.439591
Jarque-Bera	0.904459	1.354268	1.847643	1.236901	1.345283
Probability	0.636208	0.508071	0.396999	0.538779	0.510359
Sum	2250872.	896703.5	315265.5	451757.0	16194.76
Sum Sq. Dev.	1.65E+11	3.38E+10	4.92E+09	8.28E+09	13596813
Observations	14	14	14	14	14

Source: MoFEC 2021

Table 9: Test of Normality for The Difference Before and After the Reform

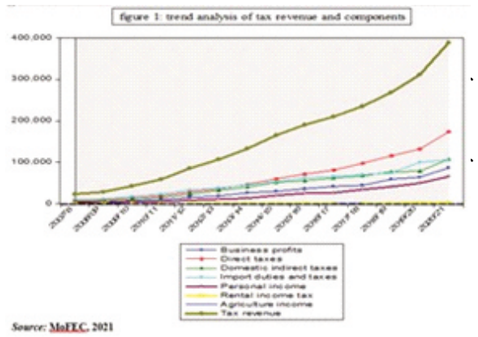
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig	Statistic	df	Sig
difference tax revenue	.304	5	.148	.787	5	.063
difference direct tax	.285	5	.200*	.897	5	.394
difference personal income tax	.214	5	.200*	.969	5	.867
difference business income tax	.285	5	.200*	.855	5	.230
difference rental income tax	.196	5	.200*	.958	5	.796

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

in millions) and a minimum of 23800.68 and maximum of 388763.5. The overall direct tax of Ethiopia starting from the years 2007/08 to 2020/21 shows an improvement with a mean of 64050.25, a minimum of 7015.290 and maximum of 173965.5.

figure 1: trend analysis of tax revenue and components



Source: MoFEC 2021

test the normality assumption was checked by using the Jarque-Bera test for the original observations as depicted in Table 8 and for the difference as shown in Table 9 above, of the values before and after the income tax law reform of 2016. The result of the tests shows the null of normality is not rejected with a probability of greater than 5% for the original observations (Probability of 0.636208, 0.508071, 0.711909, 0.685098, 0.396999, 0.538779, and 0.510359 for total tax revenue, direct tax, domestic indirect tax, import duties and taxes, personal income tax, business income tax and rental income tax respectively) and for the difference (both the shapiro wilk and Kolmogorov test shows more than 5% sig value still implying there is no normality issue in the data under consideration.

As per the paired samples t-test, there is a significant difference (sig value of < 0.001) between the mean total revenue before the reform (136,333.07) and after the reform (282,819.8). As can be shown from the mean values, the tax revenue after the reform is significantly greater than the mean revenue before the reform. To clearly distinguish which components of the tax revenue significantly improved/changed after the reform of 2016, different comparative analyses between the different components of the tax revenue were conducted by using the paired samples t-test. The following section discussed these issue

Table 9: Descriptive Statistics of the Proportion of Components of Taxation to the Total Tax Revenue Before and After the Reform

	N	before reform	After reform	Percentage change
Direct tax/Total tax revenue	5	.3542	.4212	6.7%
Personal income tax/Total tax revenue	5	.1149	.1516	3.67
Business income tax/Total tax revenue	5	.1882	.2088	2.06%
Rental income tax/Total tax revenue	5	.0059	.0080	0.29%

Source: MoFEC, 2021

To analyze if there is a significant difference in the mean value of the **direct tax**, **domestic indirect tax**, and **import duties and taxes**, the paired sample t-test was conducted. Accordingly, the equality of mean is rejected between **direct tax** before the reform (with a mean of 48,852.6) and after the reform of 2016 (120,220.1) at a 5% level of significance. The direct tax revenue after the reform of 2016 is significantly (sig value of 0.001) greater than the direct tax before the reform of 2016. In addition to the overall comparison of the mean value of the figures in the components of tax revenue, an effort was made to analyse the change in the components of the taxation with respect to the proportion (percentage) of the tax components to the total tax revenue generated before and after the reform of 2016. As shown in appendix c and Table 3 above, the proportion of direct tax to total tax revenue is significantly (sig value of less than 0.001) increased from 35% (mean percentage before the reform) to 42% (mean percentage after the reform of 2016)

As depicted in **table** 1 above, the first main category of direct tax is the employment income tax. The trend analysis shows that the amount of personal income tax is increasing from time to time with a minimum of 2667.490 and maximum of 66032.05 and overall mean of 64050.25. The second main category of direct tax is the business income tax. The business income tax also shows an increment from time to time throughout the study period with overall mean of 32268.36, a minimum of 3040.320, and 87012.64. The third main category of direct tax is the rental income tax. The rental income tax shows a mild movement in the trend analysis depicted in Figure 1 above with an average collection of 1156.768, a minimum of 54.32 and a maximum of 3,315.515.

To analyze if there is any significant difference before and after the income tax reform of the 2016 paired samples t-test was conducted. The assumption of normality was not violated by both the original variables and differences as depicted in tables 8 and 9 above which proves the appropriateness of proceeding with paired-samples t-test to analyze if there is a significant difference in the collection of the three categories of direct tax before and after the income tax reform of 2016.

Accordingly, the paired sample t-test of the personal income tax shows a significant difference (sig value of 0.002) in the amount of personal income tax before and after the reform. The mean value of personal income tax before the reform (16,087.9) is significantly lower than after the reform of 2016 (43,698.8) at a 5% level of significance. This implies that the personal income tax shows a significant increment after the reform of 2016. While analyzing the change in the proportion of personal income tax to the total tax revenue, the paired sample t-test shows a significant (at sig value of 0.001) increment of the mean proportion of 11.49% before reforming to 15.16% of total tax revenue after the reform of 2016.

To evaluate the effect of the reform on the business income tax, the paired sample t-test was conducted. The paired samples t-test shows that there is significant difference (sig value of 0.002) in the amount of business income tax before (with a mean value of 25,772.5) and after the reform of 2016 (with a mean value of 59616.1). This shows that the tax collection from the business income tax is significantly higher after the reform than before the reform on average. From the perspective of the contribution of business income tax to the overall tax revenue, the paired sample t-test shows a significant (at sig value of 0.006) increment from 18.82% before the reform to 20.88% after the reform of 2016.

Regarding the **rental income tax**, the paired-samples t-test shows that there is a significant (at sig value of 0.001) increment of the rental income tax from a n average of 833.7 (ETB, in millions) before the reform to 2293.5 after the reform. The proportion of the rental income taxation to the total revenue is also shows a significant improvement from 0.5% before the reform to 0.8% after the reform.

The United Nations Financing for Development Conference held in Addis Ababa (July 2015) highlighted the crucial role of domestic revenue mobilization in developing countries to achieve the post-

Table 10: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean	Paired Samples Sig value
Pair 1	Tax revenue	136333.07	5	42437.5	18978.6	.004
	after reform Tax revenue	282819.8	5	70345.5	31459.5	
Pair 2	Direct taxes	48852.6	5	17425.6	7792.9	.003
	after reform Direct taxes	120220.1	5	35590.4	15916.5	
Pair 3	Personal income	16087.9	5	6882.4	3077.9	.002
	after reform Personal income	43698.8	5	15125.7	6764.4	
Pair 4	Business profits	25772.5	5	8422.8	3766.8	.006
	after reform Business profits	59616.1	5	18018.5	8058.1	
Pair 5	Rental income tax	833.7	5	378.4	169.2	.003
	after reform Rental income tax	2293.5	5	684.3	306.0	

Source: MoFEC, 2021

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Tax Revenue(before-after reform)	-146486.7	30096.6	13459.62	-183856.6	-109116.8	-10.883	4	.000
Pair 2	Direct Tax (before-after reform)	-71367.5	18766.5	8392.6	-94669.3	-48065.7	-8.504	4	.001
Pair 3	Personal income tax (before- after reform)	-27610.8	8393.2	3753.5	-38032.4	-17189.2	-7.356	4	.002
Pair 4	Business tax (before-after reform)	-33843.6	10029.2	4485.2	-46296.6	-21390.6	-7.546	4	.002
Pair 5	Rental income (before-after reform)	-1459.8	320.7	143.4	-1858.	-1061.5	-10.177	4	.001

Source: MoFEC, 2021

(Ebeke & Rota-Graziosi. 2016). While The Ethiopian tax structure was dominated by indirect taxation. Dependency on foreign trade taxes would put revenue challenges to domestic resource mobilization in the long term, Hence due efforts should be exerted to raise tax revenues from direct taxes and domestic indirect taxes to have fiscal sustainability in the long run perspective (Mamo, 2017). In addition to this it reduce dependency on foreign trade tax which is volatile due to free trade agreements and regional integration from long-term perspective (Daba & Mishra 2014; Mamo, 2017). The output of the secondary data shows that the direct tax is significantly increased as a total lump sum and in terms of the proportion to the total tax revenue collected after the reform of 2016. The personal income tax (with 3.67% change), followed by business income tax (2.06% change), and then the rental income tax (0.29% change) contribute to the increment of the direct tax contribution to the total tax collection.

Conclusion and Recommendation

Conclusion

The business income taxpayers perceive that the Ethiopian direct tax is generally fair while the employment income taxpayers perceive that the Ethiopian direct tax is not fair with respect to the general fairness of the dimension of taxation

Regarding the second dimension of tax fairness, i.e. exchange with the government, business income taxpayers perceive that they are receiving reasonable benefits from the government in line with the amount of income tax paid while employment income taxpayers didn't.

Regarding the third dimension of fairness of direct tax, special provision, the employment income taxpayers highly believe that they are not using the special provisions provided in the direct tax policies and regulation since they are targeting the wealthy as well they perceive that they are paying more than the a fair share of the direct tax compared to the wealthy taxpayers as compared to the business income taxpayers.

The fourth dimension of fairness which is the perception of taxpayers towards the tax rate was found to have a significant difference between business income taxpayers and employment income taxpayers. The attributes of the direct tax rate were more highly agreed upon by employment income taxpayers than the business income taxpayers.

Regarding the fifth dimension of fairness of taxation, i.e., self-interest, there is a significant difference among taxpayers. The business income taxpayers highly believe that the income tax system is a fair system to collect tax revenue while the majority of the taxpayers did believe that they are paying more than the fair share of the income tax though there is a significant difference across the type of tax paid.

\The analysis to evaluate the components of taxation was made in two perspectives taking the reform made in 2016 into consideration. The first analysis was based on the change in the values of each of the variables considered. The finding of the study shows that there is an improvement in the amount of the different components of taxation throughout the study period from 2007/08 to 2020/21. The paired samples t-test also confirmed that the total tax revenue, the direct tax revenue, the personal income tax revenue, the business income tax revenue, and the rental income revenue show a significant mean increment after the reform of 2016 than before significantly.

The other analysis made was based on the change in the contribution of the components of taxation to the overall tax revenue collected before and after the reform. The paired sample t-test shows that direct tax, personal income tax, business income tax, and rental income tax show a significant (at 5% level of significance) increment in the proportion after reform than before the reform of 2016.

Recommendation

The overall analysis and conclusion of the study show that though the employment income taxpayers understand the attributes of the direct tax system they believe that the Ethiopian direct tax system is not a fair tax system. This perception and the analysis of the secondary data which shows the employment income tax revenues contribution increases much higher than the other components of taxation both direct and indirect taxes seems their perception is true. This claim is also supported by the perspective of the efficiency of the tax collection system of Ethiopia. So this calls for deep investigation and identification of the real causes of such a deviation and takes corrective action accordingly so that the distribution of the tax burden can be fairly distributed across the different taxpayers.

The Ethiopian direct tax system needs a major revision or reform to enhance the contribution of business income tax revenue, rental income tax revenue (which is the least contributor to the overall tax collection with slight increment from time to time), and other taxes. While for the employment income tax, there is a need to revisit the employment income tax rates and the exempted amount of income levels.

Regarding the domestic indirect tax, there is a need to enhance the contribution of domestic indirect tax to the overall tax collection as well as to the economy. Indirect taxes are assumed to have less collection cost which results in a high level of compliance (less compliance cost). Therefore the tax authority should employ sound administration and controlling system

for the collection of domestic indirect tax.

Acknowledgment

The researcher would like to acknowledge the encouragement of research work by the Ethiopian Civil Service University and the provision of funds for the data collection.

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