



The Economic Effect Analysis of Wolaita rural children: A Perception of Lottery venders Wolaita, Ethiopia

Afework Hailegiorgis Abebe, Wolaita Sodo university, afewabebe@gmail.com

Zewde Sufara Yagaso, Wolaita Sodo university, sufarayagaso2015@gmail.com

Abstracts

A lottery is a form of gambling from which revenue is obtained. Today many countries operate lotteries to increase their national income. Ethiopia had reestablished national lottery administration by proclamation no535/2007 intending to generate national revenue that could contribute to financing economic and social development programs and supervising lottery activities. In the lottery activities, children are taking part in taking from retailers by fixed commission and agreements. Many of the children from the Wolaita zone engaged in lottery ticket sales in big towns of the country. The main objective of this study was to assess the economic effects of lottery sales on Wolaita rural children. Specifically, the study was aimed to investigate the economic factors (push/pull) that make lottery sellers to engage in the lottery ticket sale, to explore the challenges and opportunities of lottery sellers in the new environment, to distinguish the contribution of lottery sales for the children's families economic life improvements and To find out the economic effects of lottery sales for lottery sellers/. This study used a descriptive cross-sectional research design. The sample size was determined by using yemane formula (1967) and 204 households were selected through multi-stage sampling techniques. The quantitative data were entered into SPSS version 20 and analyzed. The qualitative data were obtained through an interview with the social workers unit of the sampled woreda, lottery vendors in the area of destination, and FGD with composite groups of 36, each group consisting of 6. The results of the study show that the factors that push children from the area of origin are a land shortage, peer pressure, the role of child traffickers, absenteeism of parents, lack of soil fertility, the poor living condition of the parents. The pull factors of lottery vending are seeking a better life and job opportunities in the towns. The economic impact is low on the part of families and children and it created low employment opportunities as children are not beneficial. It is child labor exploitation for they are not beneficial after moving long-distance and selling lottery tickets.

Key words

Rural Economy, Lottery sale, vending, Employment, Income, Child traffic, land shortage,

Introduction

Lotteries represent an important source of government revenues in many states and countries, so they are of interest to public finance economists. In addition, lotteries provide researchers interested in microeconomic theory and consumer behaviour with a type of experimental lab that allows economists to explore these topics (Kent and Matheson, 2011). It is becoming the interest of researchers in many parts of the world. Lotteries are popular and their appeal is on the increase. In 1997 worldwide lottery sales amounted to \$115 billion, by 2009 this figure had doubled and more than 100 countries in all corners of the world operated their own lotteries (La Fleur, 2010)

Lotteries are run by national or local governments as a way of raising funds. In America, the California Lottery was created in 1984 to generate supplemental funding for public schools; about 34% of lottery funds go toward education (Charles et al., 1999). In 1999, 34 percent of total lottery ticket

sales, or nearly \$12 billion, was generated in net lottery revenue to support state government spending in the United States (Garrett and Sobel, 2002)

In Ethiopia National Lottery Administration was re-established by the Proclamation No. 535/2007. The objectives was to generate, through undertaking lottery activities, revenue that could contribute in financing the country's economic and social development programs and to supervise lottery activities. The administration issues or renews permits to undertake lottery activities, it shall collect 15% commission payments in addition to permit fees calculated on: in the case of tombola or sport betting lottery, the forecasted total revenue from lottery tickets sales; in the case of promotional lottery, the total value of the products or services allocated for prize awards including income tax; or in the case of conventional bingo and any other lottery, the total periodical revenue earned by the permit holder(FNG, 2007)

In Ethiopia the National Lottery grossed 29 million birr in profit from the New Year holiday lottery ticket sales. The tickets with a first prize of 4 million birr were sold out a week before the actual date of the winner's announcement which was on September 10th. "This year the lottery tickets were sold very fast. It was sold out a week before the draw and people were complaining as they couldn't get it on the streets," said a source Capital spoke to at the National Lottery Administration

The National Lottery Administration recorded a 107 million birr net profit from national lottery sales in the budget year that just concluded. The Administration had distributed over 149,000 New Year lottery tickets that were available on the streets for two months. As the lottery becomes more popular, the infrastructure for the collection, distribution and vending of the game tickets has also improved. The National Lottery Administration currently has over 46 branches that are under the direct supervision and leadership of the head office and well over 69 agents. Agents that sell the lottery tickets are bound by the terms of their agreement with the Administration to undertake sales in the area they are appointed to and they get 20 percent commission from each ticket they sell (Capital newspaper Monday 18th, January 2016)

At government level, lottery vending increases the economic return which contributes to expand infrastructure, improve social life of people. From the players point of it obvious that the lower income level and the higher income level people play. The higher income level groups play for their entertainment while the lower income group play to maximize their income. The latter idea is supported by economic literature on lottery sales. The economic literature on lotteries shows that lower income individuals spend a larger proportion of their total income compared to higher income individuals. Other studies found lottery ticket sales per capita were higher among lower income groups. Thus, not only do lower income groups spend a higher proportion of their income on lotteries, they buy more tickets than their higher income counterparts. Besides economic research confirms this attitude and has in fact found a significant correlation between unemployment and lottery sales. As unemployment rises, so too do lottery sales (URC, 2017). But many of the studies do not have a look at lottery vendor economic and social life.

Statement of the problem

According to the national child labour survey report of 2001, children are engaged in productive and non-productive works beyond their capacity in both the urban and rural areas in Ethiopia. In SNNPR 88.8% of the children surveyed were engaged in work (Solomon and Alemu, 2006)

Wolaita is recognized for its fertility and population density, a combination that can deceive people who are not familiar with the area. Average fertility rate of the zone is 3.6. Land shortage (0.3 hectare per house hold), environmental degradation due to natural and man-made factors, loss of land fertility due to prolonged cultivation, are major problems among others that resulted in low agricultural productivity and yield which has led to prolonged food insecurity. Erratic rainfall and drought, crop and livestock pests and diseases coupled with human diseases like malaria, pneumonia, and others are increasingly leading to a much-reduced asset base and precarious food security. Intermittent drought, and the most recent such occurrence, has also caused unusually high migration figures in almost all districts.

Most of the researches conducted in the area of child labour in Ethiopia indicate that, most people feel that shoe shining, vending of injera/kolo, selling, lottery tickets in the streets and working as taxi assistant are normal activities that cannot be considered as child labour. The reason that people give for believing that those activities are normal has to do with the need for the children to contribute to household income as most families are extremely poor. These activities are justified in the eyes of most people in both urban and rural settings as they are believed to be no harm to the children who would otherwise suffer even more due to the deep rooted poverty of households (PIN, 2009). Similarly studies also indicate that low income people engage more than the higher income people. Lottery incentives are particularly motivating in low income populations (Haisley, 2008)

The Labour Proclamation of Ethiopia Proclamation No. 377/2003 stipulates that the minimum age for employment is 14 years. Children below the age of 14 are not allowed to work at all. According to the proclamation the 14 years age is put as a bottom line for the labour market in the country. But in children at early age go to different parts of the country leaving the education. This is because of Wolaita area are densely populated with large sized families. It is difficult for families to feed their children and educate them.

Lotteries are operated in Ethiopia in order to increase national revenue. Individuals play expecting the probability of winning. All the lottery activities are monitored by the government in different branches in the country. The selling of lottery ticket is done by children aged below 15. The retailer takes lottery ticket by 15% commission from the lottery agency branches in different parts of the country and distributes the tickets to children to sold by them. The children are expected to sell to take a fixed commission and in some cases by simple agreement. This make children not economically and socially beneficial. The number of children leaves the area of origin is on the rise. Still no proper measures have been taken to tackle the problem. There has been no research conducted in the area of economic effects of selling lottery to vendors. The purpose of this research is to assess the economic effects of lottery sales on the rural Wolaita children.

General objective

The general objective of the study was to assess the socio-economic effects of lottery sales on rural children in three selected woreda of Wolaita zone.

Specific objective

- To investigate the economic factors that make lottery sellers to engage in lottery ticket sales
- To explore the challenges and opportunities of lottery sellers in new environment

- To distinguish the contribution of lottery sales for the children family economic life improvements

Basic research questions

Research Question is an integral part of the research, so the question is most important tool in guides to reconstruct what happened in the lottery sales. Therefore, this research will attempt to search answers for the following questions.

- What are economic factors that make children engage in the lottery sales?
- What are the challenges and opportunities of lottery sellers in new environment?
- What is the contribution of lottery sales for the children's economic life improvements?

Scope of the study

This research was analysing the economic effects of lottery sales in Ethiopia; in the case of Wolaita rural children aged 5-14 years old. There are many informal sectors of the economy in which the children of Wolaita engaged in different big cities and towns like shoe shining, lottery tickets selling in the streets, vending injera (traditional bread), kolo and bread, peddling, working as taxi assistant (*woyala* in local language), begging, prostitution, weaving, baking, carrying goods for people and working in the kitchen. However, this study was limited to lottery ticket selling in the street to make the study manageable and to evaluate the situation in-depth.

As it is challenge to cover all twelve rural woreda of Wolaita zone because of time, budget and logistic constraints, emphasis was given to some selected woreda namely kindo-Didaye, Kindokoisha, and Duguna Fango where there are high rate of migration of children to different towns of the country mainly Hawassa, Dilla, Ziway and Adama, Addis Ababa and Arbaminch among others.

Limitation of the study

The main limitation of this study was getting the relevant literature in the area of lottery sales and its socio-economic effect on Wolaita rural children. The other was the mobility of lottery sellers to different towns in the country during data collection. Besides as the study was conducted on children it is difficult to make them subject of study. Furthermore, logistic problem especially the limited number of cars affected data collection process.

Positive economic effects

Tax revenue

The American Gaming Association's State of the States publication reported total commercial U.S. gaming tax revenue of \$8.6 billion in 2012 (American Gaming Association, 2013). Although empirical studies of gambling industries and their effects on state budgets are limited, research has been done on state lotteries. Kearney examined household expenditure data from 1982 to 1998, in which 21 states implemented a state lottery. In her report, she studied the source of lottery ticket expenditures and concluded that spending on lottery tickets is generated by a reduction in none gaming expenditures, suggesting that other forms of gambling are not impacted by a lottery. This may result in lotteries increasing state revenues since the lottery tax is significantly higher than other types of expenditures (Kearney, 2005)

Employment

In addition to tax revenue, there are studies suggesting that casino gaming increases economic benefits by the addition of regional employment opportunities. When researching the difference in employment between counties with and without casino, Cotti(2008) found that counties with casinos see an increase in employment after casinos open. The study also concluded that casinos create benefits to employment and wages in the areas surrounding casinos, and that the employment growth effect is inversely related to county population.

Local Industries. In addition to direct economic benefits, casinos can also improve opportunities dealing with recreational, leisure, construction, and entertainment activities within the region. This is due to casinos offering other types of entertainment, such as restaurants, bars, lounges, and shopping outlets (Buultjens, 2006). The degree in which each industry benefits from casino gaming depends on the type of services that support the casino.

As previously mentioned, there are three types of economic effects that casinos contribute to: direct, indirect, and induced effects. Direct effects deal with the economic impacts within the industry that is being affected (Andersen, 1996). For example, the jobs needed in the day to day operations of the casino would constitute direct effects to the regional economy. Indirect effects occur from the increase in sales and employment by suppliers of goods and services associated with the maintenance, construction, and operation of a casino. Induced effects occur from the increase in spending by individuals whose income rises as a result of the direct or indirect activity created by the casino (Andersen, 1996). Commercial casinos directly created \$49.7 billion in consumer revenue from casino operations, hotel, food and beverage, and other types of businesses. More than two-thirds of this spending was created by actual gaming activities located in the casino. To give a complete and accurate total, both indirect and induced effects were added in to illustrate what the gaming industry means to the entire U.S. When indirect and induced impacts are added in, the industry creates an additional \$76 billion in spending and 470,000 new jobs (Bazon, et al., 2012).

A comprehensive study that tested whether casinos create economic growth was done by Rose (1998). In his report he reviewed 36 major studies and other writings on economic impacts of casino gambling/gaming, and used the results from these studies to test whether casinos bring economic growth to hosts communities. Rose concluded that a new casino, of even limited attractiveness, which is placed in a market that is not already saturated, will yield positive economic benefits to its host economy

Negative economic effects

Given the complexity of measuring the economic impacts of casinos, there is also a significant amount of research that suggests that casinos do not create the type of economic surplus that gaming companies propose.

Tax revenue

In contrast to Borg et al., (1993), Although both studies only analyse lottery gaming, the disagreement in tax revenue generation is quite significant. In their study regarding the correlation of gaming and recreational taxes, Siegel and Anderson (1999) found that a 10% increase in gambling tax revenue led to a 4% decline in tax revenue from other amusement and recreation sources. However, they did not find any consistent negative effect on other types of tax revenues. Popp and Stehwein (2002) used a similar method to evaluate the impact of New Mexico's eleven Indian

casinos. The report analysed quarterly state tax data from 1990 to 1997 and concluded that the casinos had a negative effect on overall state tax revenue.

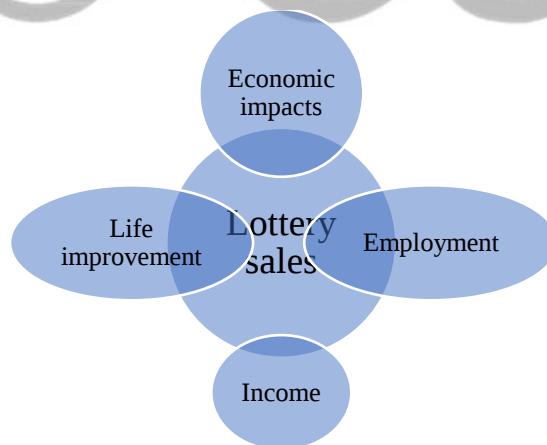
More specifically, the study found that introduction of the first Indian casino decreased county tax revenue by 1%, while introduction of the second casino decreased county tax revenue by 6%. Although state lotteries provide entertainment for millions of people nationwide, the primary goal of a lottery is to maximize lottery revenues for the state. According to Clotfelter and Cook (1989, p.,11), “Lottery agencies are not merely acting out of a liberal respect for consumer sovereignty. They are engaged in a well-focused quest for increased revenues.” In fact, the operating papers governing most state lotteries generally cites revenue maximization as the goal of the bureaucracy charged with administering the lottery.¹ In 1999, 34 percent of total lottery ticket sales, or nearly \$12 billion, was generated in net lottery revenue to support state government spending in the United States (Garrett and Sobel, 2002). Moreover, lotteries represent an important source of government revenues in many states and countries (Kent et al., 2011)

Negative attitude towards lottery sales

Negative attitudes about gambling began to soften during the early twentieth century, particularly after the failure of Prohibition (1920–1933). The state of Nevada legalized casino gambling in the 1930s, and gambling for charitable purposes became more commonplace across the country. Still, lingering fears about fraud kept public sentiment against lotteries for two more decades as cited in encyclopedia.com.

A fairly sizeable body of literature has explored the relationship between the socioeconomic characteristics of a state’s population and lottery ticket sales. These studies generally find that lottery sales are higher for individuals who belong to minority groups (Garrett, 2002)

Conceptual frame of lottery sales



Lottery sales in Ethiopia

From both the literature reviewed for this study and the interviews conducted with experts in the area of child labour, the outstanding causes that force children in the labour market include poverty, family problems and migration. Migration and Child Trafficking: Due to the pressure on the farm land in the rural areas caused by the rapid growth of population and lack of basic social services especially education, it is reported that a large number of children migrate into the urban areas especially Addis Ababa, the capital of Ethiopia year after year. It is however evident that both the

push and pull factors which are interrelated that exacerbate the migration of children from rural to urban centres. On the side of the push factors as it is explained poor living conditions of rural families especially in the three major regions namely Amhara, Oromyia and SNNPR, coupled with limited access to education force children to leave their place of origins in urban areas especially in Addis Ababa(PIN, 2009)

Research design and Method

The study adopted descriptive cross-sectional research design in assessing the economic effects of lottery sales on lottery vendors. Because cross sectional research design is appropriate to have one time contact with subject of study and to analyse the current economic effects of lottery sales. The study also adopted both the quantitative and qualitative and approaches of data collection and analysis as there were data obtained through questionnaire, interview, Focus group discussion and observation. Interview guides was used for Semi – structured and depth interview types. The interview was conducted by “*Wolaitta Donna*” language and was tape recorded.

Populations, according to Diamantopoulos (2004) a population is a group of items that a sample will be drawn from. The target population for this study is parents of lottery vendors in rural Wolaita because of age children to use them as subject of study. From parents of lottery vendors sample size would be determined to collect information in relation to lottery ticket sales and its economic effects in their lives. Among the very reasons why Wolaita rural children would be selected was, firstly, the majority of lottery sellers migrate from Wolaita area and observed in towns such as Hawassa, Dilla, Ziway and Adama, Addis Ababa and Arbaminch among others. Whereas the selected woredas were kindo-Didaye, Kindo koyesha, and DugunaFango area are better representatives of the other woreda to assess the economic effects of lottery sales as most of the children migrate from them to engage in lottery ticket sales.

Sampling technique and sample size

In the study the researchers used multistage sampling techniques to select the respondent so as to administer questionnaire. In the first stage out of twelve rural woredas of Wolaita zone, three woreda were selected by purposive sampling technique. This is because the researchers have personal experiences and knowledge about the area from which most of the children migrate to different towns of the country mainly Hawassa, Dilla, Arbaminch and Adama, AddisAbaba and Arbaminch to engage in lottery ticket sales of the government In the second stage, 6 kebeles were selected by using simple random sampling. In the third stage probability proportional to sample size method was employed to determine the number of respondents from each kebele. In fourth stage the snowball sampling was used to select lottery vendors parents for administration of questionnaires. In this study questionnaires were administered for two-hundred four (204) parents of lottery ticket sellers .The researchers used snow ball sampling techniques to obtain parents of lottery sellers for survey and lottery sellers for interview and Focus group in their birth place and in the working place mainly Sodo, Hawassa, Dilla, and Adama, AddisAbaba and Arbaminch. Besides, case studies were made with 3 children who are lotterers sellers from study area. In addition, twenty lottery sellers’ families, five experts from women’s and children’s affair from Wolaita zone and each woreda of the study as well as five experts from social affairs office from Wolaita zone and each study woreda were interviewed to get qualitative data. Moreover, FGD was made with eight (a total of twenty-four) key informants from each woreda consisting of families, elites, lottery sellers and government agents. Finally, observation was made to strength the data obtained through different tools.

Sample size determination

This study used 7816 household heads in three woreda namely DigunaFango, Kindo Didaye and Kindo Koyisha to give data about their children aged between 5-15 years old who are engaged in lottery ticket selling in different towns of the country. From total households in 6 kebeles, 204 respondents were selected. It was determined by using yemane 1967 formula $n = \frac{N}{1 + N(e^2)}$ where, n is sample size, N is target population, 204, and e is level of precision which is 0.07. proportional representation to sample size technique was used to represent each kebele proportionally to their respective households. From Diguna Fango, *Waraza Lasho* kebele out of 731 households, 19 and in *Koisha Humbo* kebele out of 522 households, 14 respondents were selected. From kindo-Didaye, in *Bosa sorto* kebele out of 1356 households, 35 respondents and in *Offa chewu kare* kebele out of 1185, 31 respondents were selected. From kindo koisha woreda, in Chereche kebele out of 972 households, 25 respondents and *Maniara* kebele out 3050 households, 80 respondents were selected. The research data were analysed by descriptive statistics (quantitative data) and exploratory approaches (qualitative data).

Location of the study area

The study area, Wolaita Zone, is one of 14 Zones in southern Nation Nationalities and Peoples Regional State (SNNPRS) of Ethiopia. It is located at 390 km to southwest from the capital city of the country, Addis Ababa along the main road that passes through Shashamane to Arbaminch. Now, newly constructed Sodo-Hosana asphalted road reduced the distance to Addis Ababa, which is about 330 km away from the capital city of the country following main road that passes through Hosanna to Arbaminch. The Zone is roughly located between 6.4 0 - 7.1 0 N and 37.4 0 - 38.2 0 E, latitude and longitude respectively.

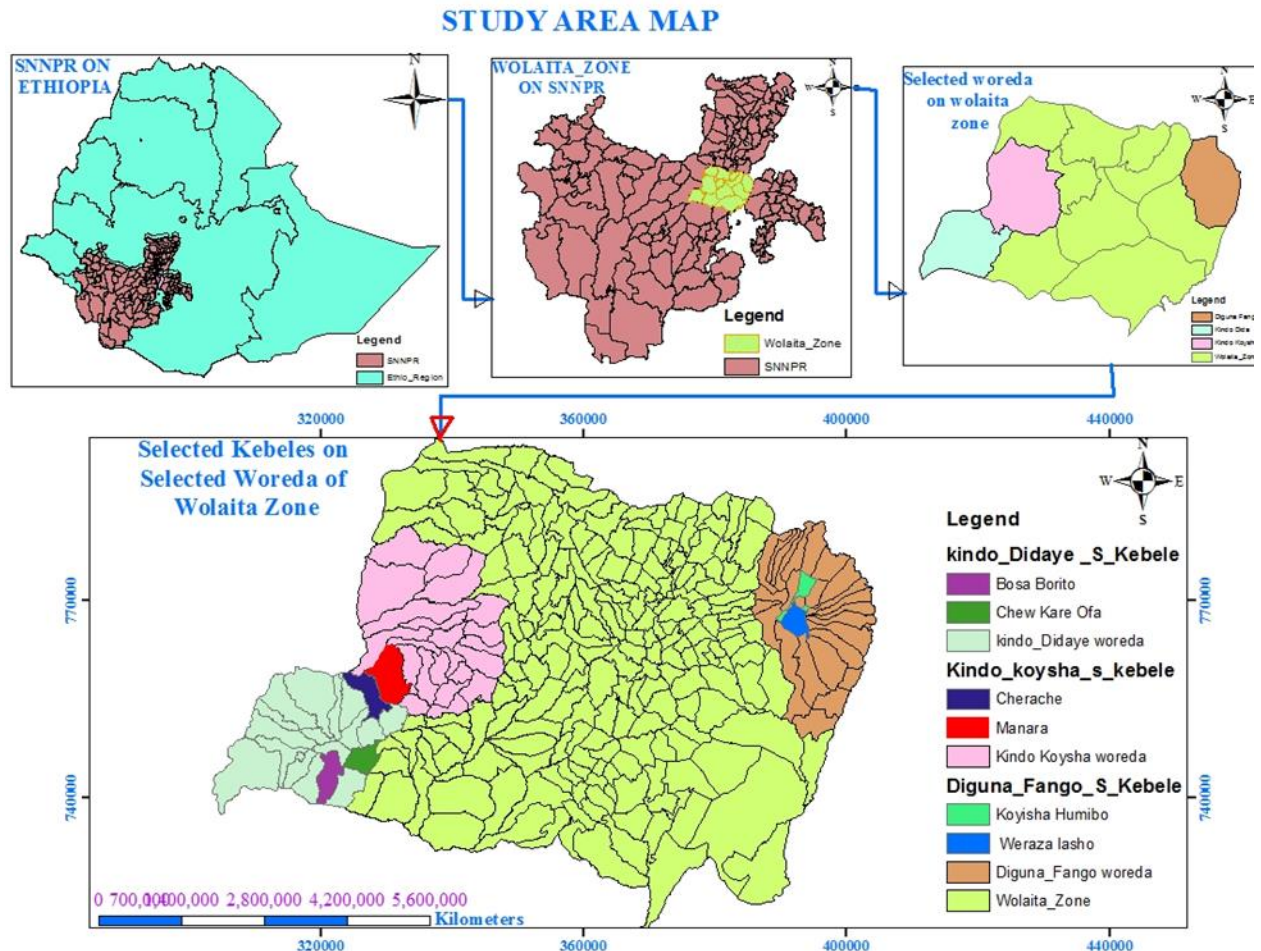


Figure 1: study area map

Results and Discussions

Household characteristics

Household is Under the U.S. Census Bureau definition, family households consist of two or more individuals who are related by birth, marriage, or adoption, although they also may include other unrelated people. Nonfamily households consist of people who live alone or who share their residence with unrelated individuals (Mcfalls, 20003). In addition, the business dictionary defend household it is all persons living under one roof or occupying a separate housing unit, having either direct access to the outside (or to a public area) or a separate cooking facility. Where the members of a household are related by blood or law, they constitute a family (Businessdictionary.com, 2020)

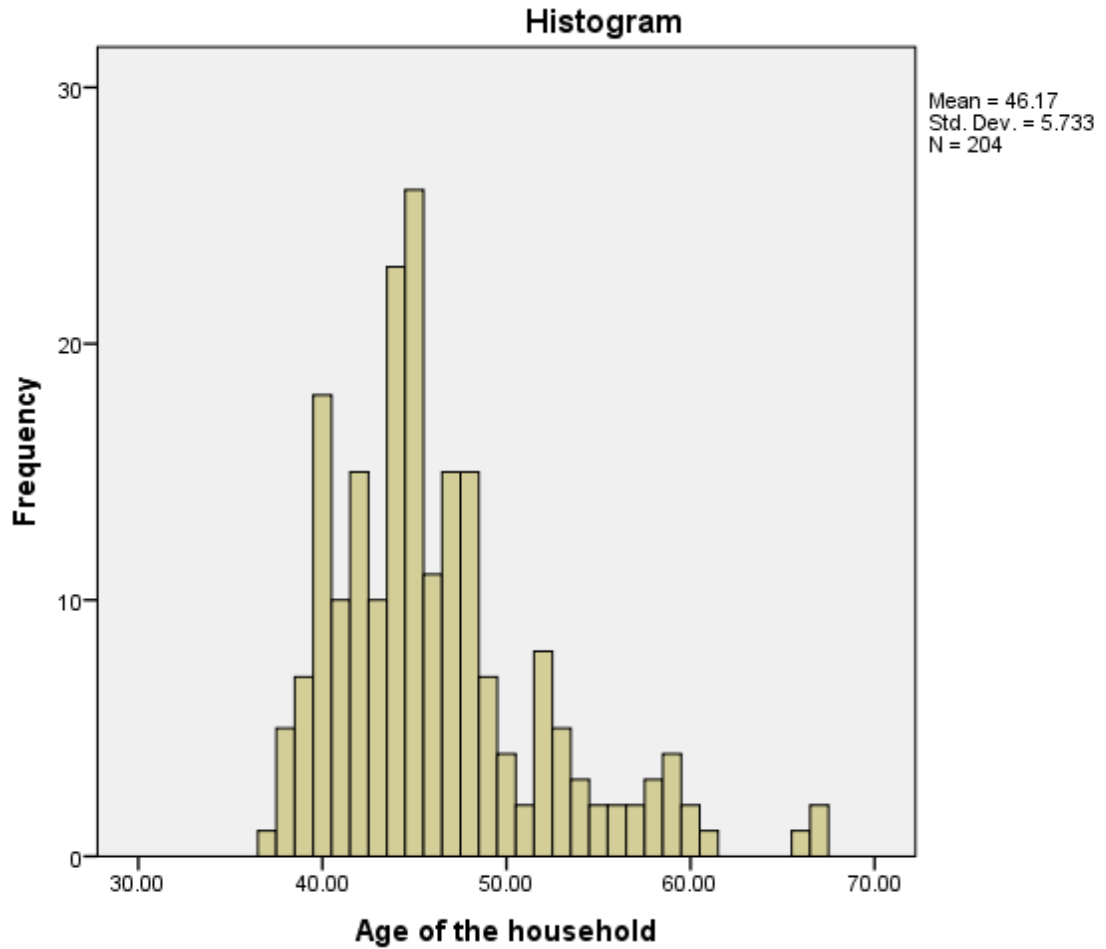


Figure 2. Age of the house hold

As it can be seen from Figure 2, the average age for the children's parents is 46 years old. The standard deviation is 5.73312. Lottery sales increase together with increases in the male to female ration (Kaizeler and Faustino, (2008).

Table 1. Sex of the household

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Female	62	30.4	30.4	30.4
Valid Male	142	69.6	69.6	100.0
Total	204	100.0	100.0	

As it is indicate in table 1, male house holded respondents are 69.6% whereas female house holded respondents are 30.4%

Table 2. Education of the holds

	Frequency	Percent	Valid Percent	Cumulative Percent
illiterate	47	23.0	23.0	23.0
primary	69	33.8	33.8	56.9
Junior	74	36.3	36.3	93.1
Secondary	14	6.9	6.9	100.0
Total	204	100.0	100.0	

As it is indicated in table 2, 23% of the respondents were illiterate,33.8% attended primary education,36.3% of the respondents attended Junior,6.9% of the respondents attended secondary education. From the table it is possible to understand that the majority of children parents that is 36.3% were attended junior level education

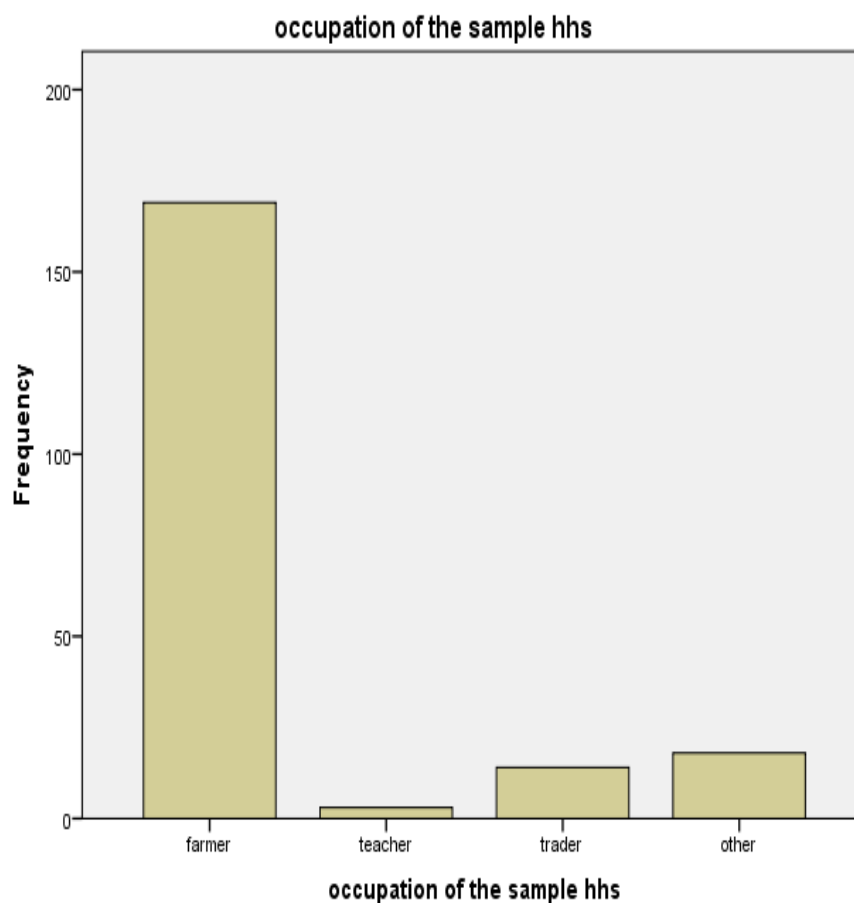


Figure 3. Occupation of the sample households.

As it is displayed in the figure 3, the majority of children parents were farmers. The number of teacher parents was small as it is known that teachers are well awarded and able to up bring their children by making them stay at home. This is because they provide food from the market, buy clothes, pens, pencils as the have sellers. Thus, it clear that as the study reveals, the majority of lottery vendors were farmers children as farmers have shortage of land, low economically and large sized family.

I. Economic effects of lottery sales

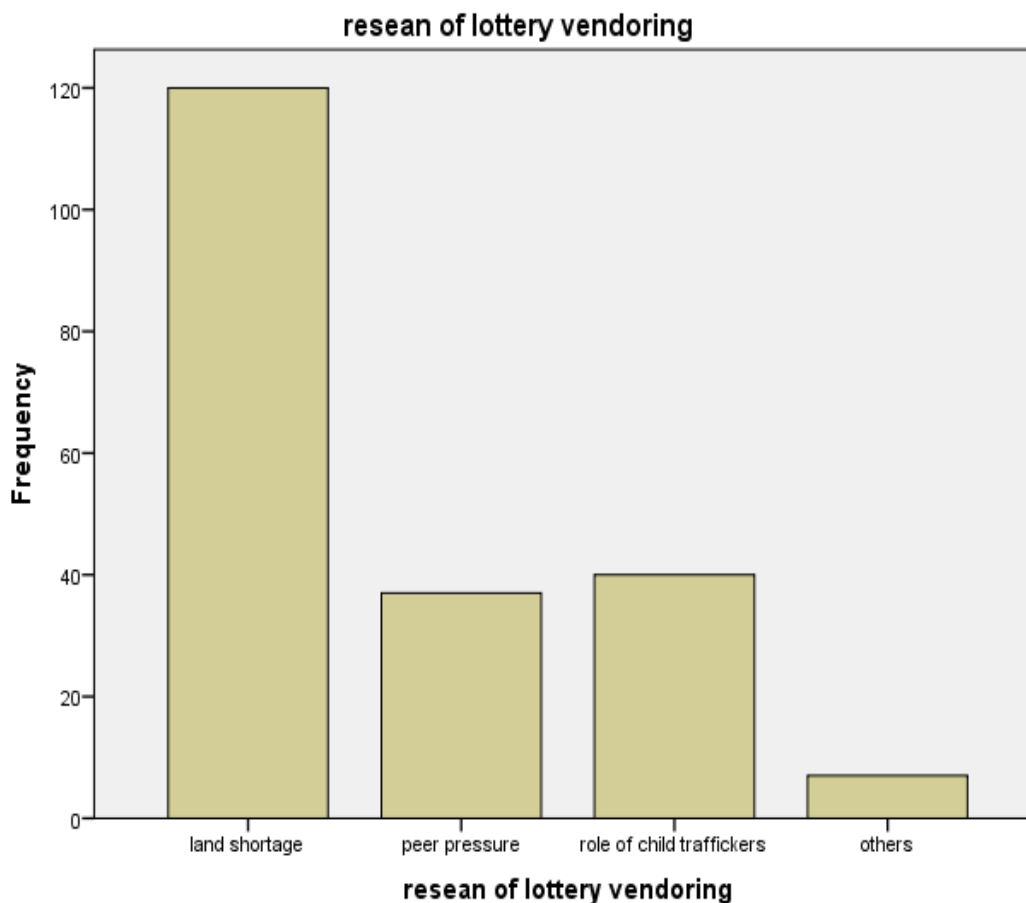


Figure 4. Factors for lottery vending

As it is illustrated in the figure 4, the reasons for lottery vending are land shortage, peer pressure, role of child traffickers and others indicating low economic level. Of the factors that push lottery sellers to engage in lottery vending is mostly land shortage of parents followed by role of child traffickers and peer pressure. The diagnostic surveys carried out using participatory rural appraisal tools in Wolaita identified declining of soil fertility as one of the most important issues that limit agricultural production both in highland and low Land areas (FARM Africa, 2005). As indicated in PIN, (2009), due to the pressure on the farm land in the rural areas caused by the rapid growth of population and lack of basic social services specially education, it is reported that a large number of children migrate into the urban areas especially Addis Ababa, the capital of Ethiopia year after year.

Table 3. To what extent lottery is profitable

	Frequency	Percent	Valid Percent	Cumulative Percent
Higher	11	5.4	5.4	5.4
Lower	167	81.9	81.9	87.3
Valid medium	21	10.3	10.3	97.5
Other	5	2.5	2.5	100.0
Total	204	100.0	100.0	

As it can be seen from the table 3, 83.3% of the respondents said that selling lottery ticket is not profitable, 16.7% of the respondents said that selling lottery ticket is profitable. But selling lottery by children as responded by 83.3% of their parents and understood during the interview with lottery sellers in Dilla, Hawassa, and Adama is not profitable. According to children during the interview in Dilla town it is the government that is profitable they are not beneficial. This is because if one sells 600 birr he/she gets 50/60 birr if it is below 600, it does not make them profitable. As the children told the researcher they become beneficial in the day that lottery is drawn.

utilization of income earned from lottery vending

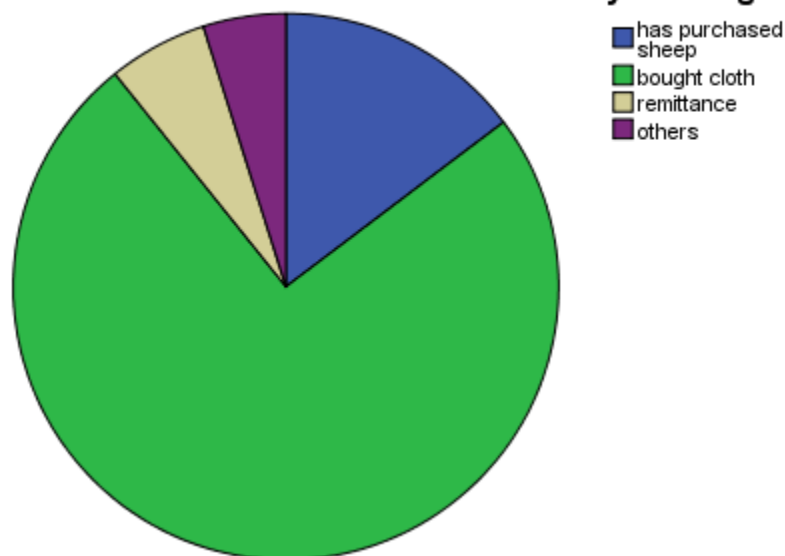


Figure 5. Utilization of income earned from lottery vending

As it can be read from figure 5, lottery sellers purchase sheep/goat depending on the agro-ecology, buy cloth during *Gifata* in Wolaita new year, give the money to their parents as remittance and others indicating they buy motor bicycles in rare cases especially this was understood during their discussion in Kindo Didaye woreda.

Table 4 How much commission does your children get from selling

	Frequency	Percent	Valid Percent	Cumulative Percent
15cent per birr	153	75.0	75.0	75.0
Valid Others	51	25.0	25.0	100.0
Total	204	100.0	100.0	

As it can be seen from table4, 75% of parents responded that their children get 15 cent per birr, 25% of the parents responded that children get others indicating their children get return simply by agreement. This data is triangulated with data obtained through the interview from lottery sellers in their destination. During the interview we understand that lottery sellers don't always get the fixed commission rather they sell the ticket simply by agreement. If they don't sell many ticket they given nothing. This is another form of labour exploitation for they get nothing after moving long distance. The other problem of lottery sellers is rainy season in which lottery sellers cannot easily move from one place to another such as market place, hotels, recreation centres because the ticket may be torn and easily damaged so that that will be deducted from their commission.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid High	15	7.4	7.4	7.4
Low	153	75.0	75.0	82.4
Medium	36	17.6	17.6	100.0
Total	204	100.0	100.0	

Table5. The economic impact of lottery vending on children

As it is indicated in the table 5, 7.4% of parents responded that the economic impact of lottery vending for children and family is High, 17.6% of the parents responded that its impact is medium and 75% of the parents responded that it is low. As known lottery a great sector from which the government earns revenue to expand infrastructure so as to

improve the life of people. But specifically, as the study is target on children and what they earn by

selling individual ticket, it is revealed that for children and their families selling lottery has low economic impact that is improvement in their economy. It should not be confused that selling lottery for the wider economy has positive impact in increasing GDP of the country. But our argument is that to what extent directly these children engaged in selling lottery are beneficial by selling the lottery tickets in different towns of the country. According to children during the survey the main factor that pull them to move to area of destination is expecting better job

opportunity as contrast to lack of job opportunity in the area of origin

Table 6. employment opportunity created by lottery

	Frequency	Percent	Valid Percent	Cumulative Percent
High	24	11.8	11.8	11.8
medium	25	12.3	12.3	24.0
Valid Low	90	44.1	44.1	68.1
nothing	65	31.9	31.9	100.0
Total	204	100.0	100.0	

As it can be seen from table 6, 11.8% of the parents responded that lottery creates high employment opportunities, 12.3% responded that it creates medium employment opportunity, 44.1% of the parents responded that lottery creates low employment opportunities, 31.9% responded that it creates nothing.

Table 7. Income earned in cash from lottery vending

	Frequency	Percent	Valid Percent	Cumulative Percent
1000-5000	105	51.5	51.5	51.5
6000-10000	57	27.9	27.9	79.4
Valid 11000-15000	12	5.9	5.9	85.3
Others	30	14.7	14.7	100.0
Total	204	100.0	100.0	

As it can be seen from table 7, 51.5% of parents responded that lottery vendors get 1000-5000 Ethiopian Birr(ETB), 27.9% of parents responded that lottery vendors get 6000-10000 ETB, 5.9% of parents responded that lottery vendors get 11000-15000 ETB, 14.7% of parents responded that lottery vendors get others amount of income such as 400,500,600 ETB. From the table it is possible to understand that most of lottery vendors get below 5000 within two years.

Conclusion

This study reveals, the majority of lottery sellers were farmers' children as farmers have shortage of land, low economically and large sized family. Selling lottery by children as responded by 83.3% of their parents and understood during the interview with lottery sellers in Dilla, Hawassa, and Adama is not profitable.

Majority (75%) of the parents responded their children get 10% commission per each ticket. This data is triangulated with data obtained through the interview from lottery sellers in their destination. During the interview we understood that lottery sellers don't always get the fixed commission rather they sell the ticket simply by agreement. If they don't sell many ticket, they are given nothing. This is another form of child labor exploitation for they get nothing after moving long distance. The 75% of the parents responded that the economic impact of lottery vending on the economic life of children and their families is low. As it is known lottery is a great sector from which the government earns revenue to expand infrastructure so as to improve the life of people. But specifically, as the study is target on children and what they earn by selling individual ticket, it is revealed that for children and their families selling lottery has low economic impact that is improvement in their livelihood. It should not be confused that lottery for the wider economy has positive impact in increasing GDP of the country. But our argument is that to what extent directly the children become beneficial by engaging in lottery sales in different towns of Ethiopia.

Recommendation

Based on the findings, the following recommendations are given:

- The government should diversify the economic activities farmers instead of depending only depending on crop production in order to increase their income so that they can well educate and manage their children. That means it should teach them to engage in other activities such as trading, animal fattening and others
- Lottery has a wider economic impact to increase the GDP of the country. But the government should modernize the sector rather than depending on children aged between 5-15 and it fix the age of the children, ensure the whether the stated commission per lottery ticket is paid to the vendors
- The average age 12 is school age if this situation continuous, it will badly affect school children and creates more uneducated children. This deprives the rights of children to learn and has long term economic and social effects. Thus, it is better to design new project that makes children beneficial stake holders such as university scholars in catchment area as community services and others and adapt school feeding programs encouraging self-financing system at school level.
- Religious institutions should create awareness by teaching in integration with their preaching to minimize the illegal migration of children
- All the stockholders including all society, government body, institutional leaders, religious leaders, respected individuals, NGOs should play a vital role minimize child migration for lottery sale

Reference

- Anderson, K.C. and Siegel, R.M., (1999) Optic flow selectivity in the anterior superior temporal polysensory area, STPa, of the behaving monkey. *Journal of Neuroscience*, 19(7), pp.2681-2692.
- Anderson, N.B., (1999) Racism as a stressor for African Americans: A biopsychosocial model. *American psychologist*, 54(10), p.805.
- Andersen, T.G., (1996) Return volatility and trading volume: An information flow interpretation of stochastic volatility. *The Journal of Finance*, 51(1), pp.169-204.
- American Gaming Association, (2013) <https://www.americangaming.org/new/2013-report-shows-commercial-casino-industrys-highest-growth-rates-since-recession/> [accesse June 17 2020]
- Bazelon, C., Neels, K. and Seth, P., (2012) Beyond the casino floor: Economic impacts of the commercial casino industry. *American Gaming Association*, pp.2-3.
- Borg, W.R., Worthen, B.R., and White, K., (1993) *Measurement and evaluation in the schools*. Longman Publishing Group.
- Buultjens, J., (2006) A comparison of wage determination in New South Wales and Queensland (Australian) clubs. *International journal of hospitality & tourism administration*, 7(2-3), pp.135-153.
- Capital newspaper Monday 18th, January (2016) <https://www.capitalethiopia.com> [accessed June 17 2020]
- Charles T. Clotfelter, and Philip J. Cook, (1999) State Lotteries at the Turn of the Century: Report to the National Gambling Impact Study Commission, Duke University
- Coughlin Cletus, Thomas A. Garrett, and Rubén Hernández-Murillo, (2006) the Geography, Economics, and Politics of Lottery Adoption
- Clotfelter, C. T., and Cook, P. J. (1989a) Selling hope: State lotteries in America. Cambridge, MA: Harvard University Press.
- Clotfelter, C. T., & Cook, P. J. (1989b) The demand for lottery products Cambridge, MA: National Bureau of Economic Research. Working Paper No. 2928.
- Cotti, C., (2008) The effect of casinos on local labor markets: A county level analysis. *Journal of Gambling Business and Economics*, 2(2), pp.17-41.
- Diamantopoulos, E., (2004) Hilbert matrix on Bergman spaces. *Illinois Journal of Mathematics*, 48(3), pp.1067-1078.
- Garrett Thomas A. and Sobel Russell S. (2002) State Lottery Revenue: The Importance of Game Characteristics Working Paper 2002-011
- Haisley, E, Mostafa, R and Loewenstein, G (2008). Subjective Relative Income and Lottery Ticket Purchases. *Journal of Behavioral Decision Making*. *J. Behav. Dec. Making*, 21: 283–295, Household.BusinessDictionary.com.WebFinance,Inc.<http://www.businessdictionary.com/definition/household.html> [accessed: June 18, 2020]

FARM Africa (2005) *Soil Fertility Practice in Wolaita Zone, Southern Ethiopia: Learning From Farmers*. Policy and Research series. Available at: W.W. farm Africa. Org.uk. Wolaita.

FNG(2007) Federal Negarit Gazeta of the federal democratic republic of Ethiopia, Addis Ababa 23 July, 2007

Jones, J. M. (2008). One in six Americans gamble on sports. Gallup Poll. Retrieved October 29, 2008

Kaizeler, M.J. and Faustino, H.C., (2008) Demand for lottery products: A cross-country analysis.

Kearney, M.S., (2005) State lotteries and consumer behavior. *Journal of Public Economics*, 89(11-12), pp.2269-2299.

Kent R. Grote and Victor A. Matheson(2011) *The Economics of Lotteries: A Survey of the Literature*. college of the holy cross, department of economics faculty research series, paper no.11-09*Worcester, Massachusetts, USA

La Fleur, T. (2010) *World Lottery Almanac*. Boyds, MD: TIF Pub. People in need Ethiopia. July 2009. A study on the situation of child labour in Ethiopia: review of existing studies and brief assessment Addis Ababa.

Mcfalls Joseph (2003) *Children and Families*

<https://www.prb.org/whatsahouseholdwhatsafamily> [accessed 18 June 2020]/

PIN (2009) A study on the situation of child labour in Ethiopia: review of existing studies and brief assessment Addis Ababa.

Popp, A.V. and Stehwien, C., (2002) Indian casino gambling and state revenue: Some further evidence. *Public Finance Review*, 30(4), pp.320-330.

Rose, S.M. and Patel, P.M., Accenture LLP, (1998) *Computerized multimedia asset management system*. U.S. Patent 5,752,244.

Solomon S and Alemu A (2006) A Study on child labor in three major towns of southern Ethiopia. Ethiopia. J. Health development.

University Research Centre (2017) *An Economic Analysis of a Lottery in Mississippi*. University Research Center Mississippi Institutions of Higher Learning Jackson, Mississippi