

The Role of Tax on Food Price with Special Reference to the Low Earners House Hold: Document and Empirical Evidence Review

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Abstract

The recent surge in food prices continues to be a concern for policy makers as well as for the public at large. This requires appropriate policy responses – both immediate as well as longer term responses. To better understand this phenomenon, this study explores the role of tax in current food price trends in developed, and developing countries including Ethiopia. The study basically reviews documents and empirical findings. The results indicate that: Despite of other factors that influence food prices (such as: cost of raw materials, existing trends that override tax influences, economic conditions and other legislative changes that outweigh price effects of food taxes and strategic pricing). Also, the introduction of a tax in the markets increases the cost of the product which in turn may lead to a price increase and consequently it could harm family economic security due to higher proportion of their income spent on foods among low-income (versus higher income) consumers, which could also have negative impacts on income available for other necessary purchases besides food consumptions such as: education, shelter, medication, hygiene, saving, and like would be interrupted and push them further into poverty. At the same time, monetary expansion considered unanimously as one of factors that aggravated the food price situation in Ethiopia. In this regard, over the last few years the government has made considerable efforts to halt food price inflation, but still the extent of current level inflation has a damaging effect (especially for the low income household) unless considerable policy. Thus, it requires consumer-oriented (low income earners) well-designed interventions need to be designed. Such as: Reduction of tariffs and customs fees, Releasing public goods and providing consumer subsidies, Suspension/ reduction of VAT and other taxes, Control prices and restrict private grain trade and Safety net measures were among the most measurements used to solve food price. At the end, the findings further require in-depth study to support this paper conclusion.

Key Term: Tax, Food Price, Low Income Earners, Policies Pursued.

INTRODUCTION

On the surface, public policy is intended to improve people's lives. This being the case, a benevolent policy analyst will want to find opportunities to achieve social welfare improvement with few (or no) offsetting negative effects. In doing such public objective, most of underdeveloping countries took collecting tax from the citizen the first, and the major mechanism policy tool for reaching social welfare goals. For instance, the government imposes and collects taxes on targeted goods, such as Value Added Tax and other, is a form of tax and a means of raising general revenue in most of the countries. Taxes can influence what people eat and drink that means it serves to influence purchasing patterns to those which collect taxes to fund campaigns on healthy eating, but they also have important limits and costs. As such, research shows that a food tax would worsen the tax system's regressiveness—that is it would hit low-income earners harder than it would hit high-income earners—and could harm family economic security due to higher proportion of income spent on foods among low-income (versus higher income) consumers, which could have negative impacts on income available for other necessary purchases besides food, need and demand for public assistance, childhood development, ability to pay for health services and medicine, economic equity, and also significantly affects individual investment (De Mooij and Ederveen, 2008). Whether taxes are a promising option depends on the specifics of the social and economic environments, the nutritional harms being targeted, the way taxes are designed, and the range of other policy options available and the adverse consequences on selected individuals should be noted. As a response to this, there should be a policy that comes with an immediate short-term measure. For instance, from trade-oriented policy side reducing tariffs and restricting exports while also from consumer-oriented policy side food subsidies, social safety nets, and *tax reductions* were the important instruments used by so many countries to reduce the food price effect such as: Bangladesh, Egypt, India, Indonesia, Mali, Mexico, Morocco, Pakistan, Peru, the Philippines, Senegal and Turkey, have reduced or eliminated food tariffs or taxes (Mulat D, *et al*, 2009).

Considering price situation in Eastern Africa as well as in Ethiopia, the first quarter of 2011 showed an upward trend in domestic food prices above the highest reported peak experienced during the global food crisis in year 2008. During the 2007-2008 food price crisis, some governments acted in haste, imposing export restrictions or engaging in panic buying and hoarding, which disrupted world markets and made an already difficult situation worse (Tadesse Kuma, 2012). The rising food price further worsens those below minimum income earners putting their purchasing power low. According to USAID (2010) report on progress towards MDG goals, though much has been achieved, much remains to be done in the wake of recent food price surge. In

Sub-Saharan Africa, while the proportion of people living on less than \$1.25 per day has fallen, the absolute number of people living in poverty has continued to rise to nearly 400 million. The global food price hike in the recent years has aggravated this situation further.

In fact, Ethiopian economy was historically known for its low inflation. At present, however, this history has changed. It has been experiencing two digit inflation and considered as one of the most affected countries, with the exception of Zimbabwe and some small island economies, had the strongest acceleration in food price inflation in Sub-Saharan Africa (IMF, 2008a, 2008c; Minot, 2010, Durevall *et al.*, 2010). The food price in Ethiopia is not only high but also relatively more volatile. This abnormal food price surge put millions of rural and urban net food buyer at risk. In Ethiopia where large proportion of household income goes for its purchase, let along large surge slight increase has great implication for welfare of millions of households. Evidently such large changes in a space of few years can undermine the rebound in per capita incomes in the last decade and the poverty reduction effort of the government to take essential action toward the causes of relative price changes in Ethiopia.

Like other countries, the Ethiopian government have been forced to take several price controlling mechanism to ease the burden of high food prices. Remindful of the past decades with several years of massive famine and political upheavals, the Government of Ethiopia is focusing its efforts in three ways: on food production, food aid, and price stabilization. Indeed, the Government has made several policy responses to circumvent its negative effects on the welfare of people, yet it is not curved. even more recently the government remained to be silent on the taxes imposed consumers and its effect on food consumption which could probably must be taken as one of the factor for the increasing of food price, also in country like Ethiopia, majority of citizen are in low income category imposing tax on food have greatest negative effect on food security. Indeed, for the government's policy measure to be effective, it requires the identification of the root causes of the food price surge and valuing their relative importance. So far, there is no consensus on why Ethiopia experienced such high food price surges. The puzzle is that the increase in inflation in the recent years coincided with relatively favorable harvests, whereas in the past inflation Ethiopia had typically been associated with agricultural supply shocks due to droughts. In the case of tax the conventional wisdom in Ethiopia is that the tax on grain sales falls on traders, the evidence indicates that in large part these taxes are passed on to farmers in the form of lower producer prices and to consumers in the form of higher retail prices. Consumers in general and civil servants in particular are at verge of crisis. Currently in Ethiopia there is no guarantee that today's price level will remain the same to for tomorrow. This in turn resulted in uncertainty in consumption and welfare of lion's share of majorities who have hand-to-mouth income. In this regard, (Patric.C and Marinos .T, 2000)'s investigate 'how do food tax affect the food market', and found that taxes affect the consumer food price, saving and investment. Similarly, (Abebe S. and Andinet D, 2013) explained that tax is one of the factors must be taken for the rise of price of a particular commodity in Ethiopia, and they confirm that the money spend by low income family on different commodity affects poor households or family economic security. As some of anecdotal evidences indicate, the failures in the food security policies in many developing countries including Ethiopia may account that policy makers lack the evidence needed to make informed policy decisions. So, the negative effects of tax on food consumption could have been ameliorated if policy makers had been better informed about the tax effect on food price situation. Understanding its dynamics overtime has great importance for policy makers as well for public at large. Having said this, the purpose of this paper is not to argue against the principle of collecting tax revenue on the movement or sale of grain, there are very important policy issues with regard to the current collection of taxes on food consumption by giving due consideration on poor house hold. Herein, attention is paid to: (1) understand the rationale and its effect of the food tax on consumers, (2) *possible unintended consequences of implementing the taxation of foods, its effect on food security and possible controlling mechanisms.*

Review of Document and Empirical Evidence.

In this section, before, the author comes to conclusion, the author reviewed a detail evidence related to the topic. In doing so, the section tried to revealed the a number of studies that has been examined and revealed finding by different researchers from developed and developing countries(including Ethiopia) to provide a concrete evidence for the paper conclusions.

Cause and Consequence of Food Price Inflation

The impact of food price inflation on the welfare of low income groups who have limited means to adjust price change is straight forward. In Ethiopia, food expenditure of total household income estimated to account for more than 60 percent that any increase in food price has negative effect on the wellbeing of large majorities. When food price get inflated, the income of the house-hold will be deviated to purchase food leaving another necessities behind because food is the prior necessity. Hence the majority of income is devoted to buy food, other necessities such as: education, shelter, medication, hygiene, saving, and the like will be interrupted.

Despite the various causes of food crises, the hardships that individuals and communities face have striking similarities across disparate groups and settings. These include: inability to afford food, and related lack of adequate caloric intake, distress sales of productive assets, and migration of household members in search of work and reduced household spending on healthcare, education and other necessities.

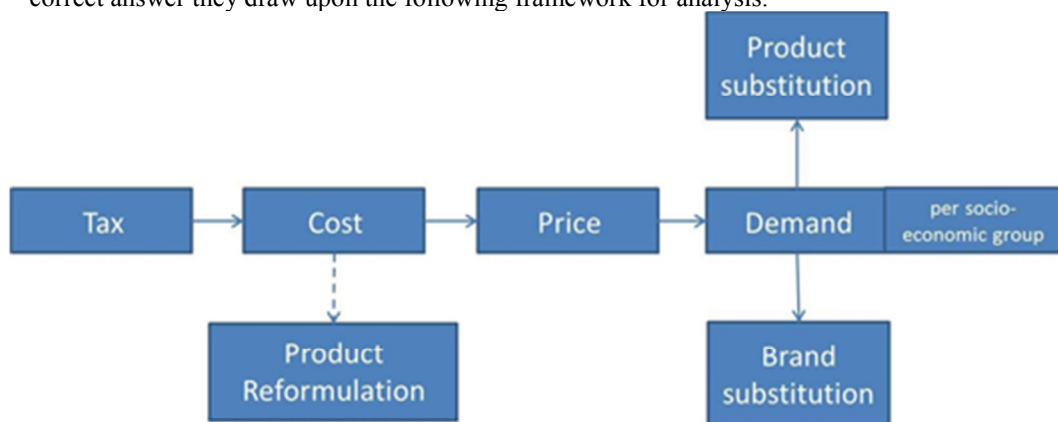
High food price is both blessing and threat. That mean, it is blessing for producers who respond for it because it can be an incentive to farmers to increase production provided they have the means to respond to such opportunities and can access markets. It is threat because food prices hit the world’s most vulnerable people the hardest, especially the urban poor and landless, who already spend more than two-thirds of their income on food, as well as smallholder farmers who are net food buyers. High food price volatility may erode confidence of both producers and traders by increasing uncertainty which in turn deters the investment that is needed for increasing food production.

In general, we can’t avoid different forms of inflation; it has been and will be there as long as mismatch in production and demand situation. There are many argued causes for the rising levels of rising of food price. Despite of different arguments the only way out does properly managing inflation mainly understand its underlining causes. If the cause of the inflation is clearly determined, it will be trouble-free to manage. If the cause of inflation is demand-pull which is initiated by high aggregate demand due to high money supply, it can be managed through monetary policy by increasing interest rate which helps to increase saving and decrease consumption, decreasing money supply, imposing tax can be good instruments. If it is resulted from malfunctioning marketing system, reform in market institutions, building market infrastructure, and enhancing competition are partly means for improving the situation. On the other hand, if it is known that the cause of inflation is cost-push which is manifested by low aggregate supply due to scarcity of factors of production, high prices of inputs, low production can be equilibrated by reducing input prices through decreasing taxes, subsidizing and so on.

Regarding Ethiopia’s inflation, there appears to be little consensus on why Ethiopia experienced such a rapid rate of inflation. FAO (2008), however, point out that domestic and external factors account for the recent inflation, among them (i) increase in international commodity prices including oil prices; (ii) structural change and continued good economic performance; (iii) increasing supply of money and injection of cash into the rural economy; (v) changes in farmers behavior to supply products more uniformly over the year (improvements in access to micro-credit, storage facilities, marketing information, etc; and (vi) increased local purchases by governmental food security institutions, agricultural cooperatives, and relief agencies. *Recently studies showed that taxes could be one possible cause of price increase despite of other factors. In other word, introduction of a tax increases the cost of the product which finally lead to product price increase (Ecorys, 2014; Wallin, A.,etal.,2015). Also, no conclusive analysis of the effect of food taxes on food sectors was available, while also the effect of food taxes on employment, investments and trade flows within the Ethiopia internal market have not yet been researched in-depth. However, the purpose of this paper was not to make in depth study of the case rather to review current facts in over the world and in the developing country.i.e.Ethiopia, which require future research on the topic and also need government attention.*

Frame Works: Taxes and Food Price.

- A. Ecorys (2014) tried to investigate how do food taxes impact the consumption of foods? To find out the correct answer they draw upon the following framework for analysis.

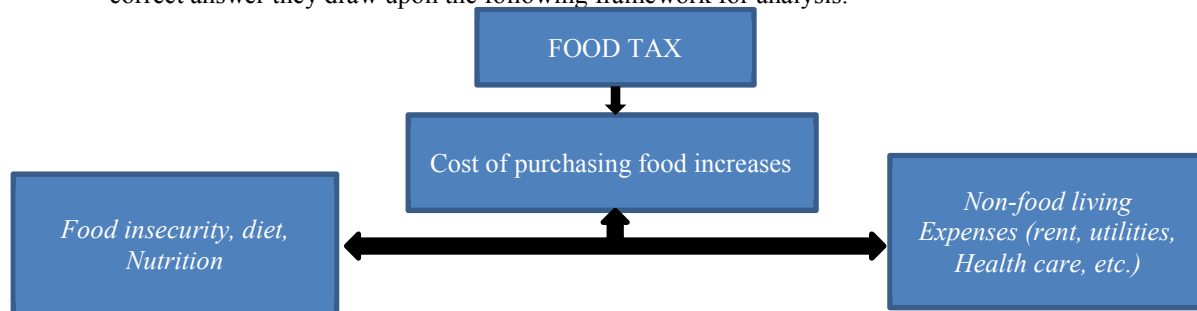


Among some proposed objective, the study tried to test the following two points.

1. Introduction of a tax increases the cost of the product which in turn may lead to a price increase;
2. Product reformulation, where possible and feasible, is one of the options to reduce the impact of the tax on the cost of the product (for specific taxes as these are levied on the raw ingredients, whereas ad

valorem taxes are levied on weight/volume irrespective of the product ingredients.

- B. Wallin, A., *et al.*, (2015). A Health Impact Assessment of a Food Tax in New Mexico: To find out the correct answer they draw upon the following framework for analysis.



Among some proposed objective, the study tried to test the following two points.

- ✓ Impact of food tax on Family Economic Security: Non-Food Living Expenses.
- ✓ Impact of food tax on Family Economic Security: Food Insecurity, Diet, and Nutrition.

Reason / Rationale of Food and Beverage Taxes of Interest to Civil Society

Taxes are important sources of public revenue. The existence of collective consumption of goods and services necessitates putting some of our income into government hands. Raising government revenue through taxes on unhealthy foods and beverages can provide means to reduce the additional cost imposed on the society from its consumption, and to address the regressive nature of the tax by providing subsidies on healthy foods. While taxes on very specific food or beverage products are not expected to yield large tax contributions relative to other sources of tax revenue, the potential of the taxes to raise additional revenue has been used alongside the public health argument in the debates on the implementation of the majority of existing food and beverage taxes (e.g. Finland, Hungary, Denmark and France).

The other reason talks have emerged on introducing specific food and beverage taxes is because of public health concerns. Over-consumption of energy dense foods high in fat and sugar, and sugar-sweetened beverages (SSB), is related to obesity and increased prevalence of type diabetes, coronary heart disease (CHD), other cardiovascular diseases (CVD), several cancers and other NCDs (3-8). Furthermore, consumption of sugary foods and drinks is the primary cause of tooth decay. Taxes can be used to make unhealthy food more expensive relative to healthy foods and thereby incentivize healthier food consumption behavior. So, policies that lower the price of foods are understandably popular while food taxes to reduce food price effect on low income earner, to the contrary, are unpopular because of their regressive nature. Food taxes are considered to be regressive because low-income earners pay relatively larger share of their disposable income on such taxes. However, those in lower socio-economic groups purchase a greater share of energy from less healthy foods and beverages than those in higher socio-economic groups which places them at a greater risk of obesity and ill-health. This is at least partly due to the higher relative price of foods such as fruits and vegetables and lower relative price of unhealthy foods such as confectionery, soft drinks, snacks, fast food, breakfast cereals and convenience foods (Capacci S *et al*, 2014).

Taxes are a common measure to internalize the cost of negative externalities. Negative externalities are, by definition, private actions that impose costs on society. Food itself is associated with two types of externalities. First, obesity, if triggered by over-consumption of foods, imposes costs on society through higher medical costs, loss of productivity, absenteeism and subsequently, welfare payments. Second, unsustainable food production, focusing on quantity of food production, has a significant negative impact on the environment (Tukker A. *et al*, 2006). On the other hand, food taxes affect food prices, which matter for consumers, particularly low-income earners who spend a greater share of their disposable income on foods. So, there should be policies that lower the price of foods are understandably popular while food taxes to reduce food price effect on low income earner.

Impacts of Rising Food Prices on Household Poverty.

In addition to the impacts of high or low food prices discussed in the different part of the paper in this sections also the study tried to present the summary of impact of food price rising. But, before discussing some of the negative impacts of price volatility, it may be helpful to point out that, at a volatile prices might actually benefit certain people, even if the price changes are not predictable. For example, rich consumers who can buy in bulk when food prices are low and then store the food for later use are able to buy more food when prices are low and less when prices are high, thus paying, on average, a lower price for food. Another example would be those people who can afford to buy the assets that poorer households sell at very low prices when desperate for funds or faced with natural disasters such as drought (K. Basu. 1986). In general, however, the costs of unstable and

unpredictable prices would seem to far outweigh any benefits such as these, especially for the poor and food-insecure (FAO, 2011).

Having said that, the potential for a food taxation policy to have adverse consequences on selected individuals should be noted. Based on different evidence, higher proportion of income spent on foods among low-income (versus higher income) consumers and evidence for their higher consumption of added sugars and junk foods such an excise tax would likely be regressive toward these individuals (Drewnowski A, 2004; Bowman S, 1999).

Coupled with the greater economic constraints among low-income, the direct health benefits from reduced consumption of junk foods through taxes might be offset by the substitution of these foods with other unhealthy foods, with harmful non-dietary health behaviors, such as smoking, or with the lack of substitution with other foods despite the reduced consumption (i.e., increased food insecurity).

Increases in food prices have a direct impact on poor households' real income. Whilst the proportion of household expenditure on consumption may vary depending on whether households are net consumers or producers of food, approximately half of household budgets may be spent on food in low income countries, and around one third in middle income countries; with the poor tending to spend larger fractions on food. Any increase in food prices is therefore likely to have a disproportionate effect on the poor, and estimates suggest that disposable incomes will be cut by a quarter as a result (Wiggins and Levy 2008). When food price get inflated, the income of the house-hold will be deviated to purchase food leaving another necessities behind because food is the prior necessity. Hence the majority of income is devoted to buy food, other necessities such as: education, shelter, medication, hygiene, saving, and the like will be interrupted. Households who are net consumers in rural and urban areas are most likely to face the negative effects of high food prices, and households' resilience to these increases will depend on their available coping strategies. Typically, poor households have limited strategies in which to cope with such shocks – having little in the way of savings or access to credit to smooth consumption when needed. Some households may be able to draw on community or family support, but where this is unavailable (especially where other households are also feeling the impact of the high prices) households often have to employ negative coping strategies (including a reduction in their asset base) which in turn erode their future abilities to cope with such crises and push them further into poverty. Reducing household expenditure in other areas may mean a reduction in spending on food and education, therefore affecting child wellbeing. Children will be affected by the way in which the food crisis influences national government policy, especially in the area of social sector spending and provision of services, by employment/ income seeking strategies to supplement declining household income and the differential integration of men, women and children in the labour market, and also by how high prices affect household poverty. The impacts on children are likely to vary between Intra-household (the house hold different structure).

In Indonesia, for example, the impact of the economic crisis in the late 1990s depended on where the household lived, whether the household was in a rural or urban area and the size and composition of the household (Levinsohn *et al.* 1999). Variations in regions' agro-ecological environments and economies, households' livelihoods, their links with markets and positions in value chains and roles in food production are also key elements which influence the differential impacts of shocks on household poverty. So, identifying the impacts of the food crisis on children additionally requires understanding how household responses and/or coping strategies are influenced by intra-household decision making and control over resources. Because of higher levels of vulnerability and reliance on adults or others, childhood poverty has a strong relational nature meaning that intra-household dynamics and distribution of power and resources may have a profound effect on their experience of poverty (Jones and Sumner, 2008).

International Evidence on the Food Price and Tax Role in Food Price.

Taxes can be collected from manufacturers, distributors, retailers, or consumers. That selection determines who is responsible for sending payments to the government, but it does not determine who ultimately bears the tax. If taxes are levied on businesses, they may absorb it in reduced profit margins, increase prices to pass some or all of it through to consumers, or bargain with workers and suppliers to pass some of it back onto them. If taxes are levied on consumers, businesses may keep their prices steady or may lower prices to offset some or all of the taxes consumers face. Studies typically find that businesses pass on a large fraction of excise taxes they pay and do not reduce prices very much when taxes are levied on consumers. Consumers thus bear most of sales and excise taxes via higher prices, and businesses bear relatively little of the burden through lower profit margins. In some cases, profit margins expand, with businesses raising prices more than the taxes (Cawley, John. 2015).

In this regard, recent academic research also revealed that the effect of food price increasing on individual house incomes resulted from the countries taxes reforms. For instance, Ecorys (2014) investigated on Food taxes and their impact on competitiveness in the agri-food sector indicated that the most comprehensive study of the impact of the existing taxes in Europe, based on data from Euro monitor Passport Database, found an expected reduction in consumption (purchases) resulting from price increases due to the taxes. For soft drinks,

the tax has resulted in an increase in the price by 3- 10% and a reduction in consumption by 4-10% in all four countries. Evidence indicated over-shifting of the tax mostly in Finland but also to a small extent in France and Hungary (Ecorys, 2014). Furthermore, the study found and concluded that higher product prices occurred in conjunction with profit margins remaining stable, indicating full pass-through of the tax. For a number of taxes examined, prices increased by significantly more than what can be directly attributed to the tax (with margins remaining stable), clearly showing that factors other than the tax (and other than over-shifting) influenced prices in the same period the tax was introduced. In some cases, prices showed no effect following the tax changes, equally demonstrating that existing trends and factors other than the tax can have a stronger influence on price. Other factors influencing prices may include cost of raw materials, existing trends that override tax influences, economic conditions and other legislative changes that outweigh price effects of food taxes and strategic pricing (France - low calorie cola and Hungary - non-taxed juices. The study recommend product reformulation, where possible and feasible, is one of the options to reduce the impact of the tax on the cost (for specific taxes) and thus on the price of the product. Product reformulation is more likely where the design of the tax is based on the level of certain ingredients (sugar, salt etc.) in the final product. As such, a specific tax provides a stronger incentive (compared to an ad valorem tax) to reformulate products as manufacturers may be able to lower the impact a tax has on their cost by reducing or removing the taxed ingredient. The study tried to state different factors that affect food price but also the study was never denied the impact of tax have on food price rising.

Furthermore, Wallin, A.,*etal.*,(2015) also tried to investigate the Health Impact Assessment of a Food Tax in New Mexico and found that Food Tax highly affect Family Economic Security because taxing food would cost each New Mexico household around \$350 per year, or \$29 per month, on average. Highest-income earners in New Mexico would spend about one-half of 1 percent of their income on a food tax, while the lower half of New Mexico earners would spend around 1 percent of their income on the food tax alone—double the rate that high earners would pay. Moreover, the study show that a food tax would exacerbate the tax system’s regressively—that is it would hit low-income earners harder than it would hit high- income earners—and could harm family economic security, which could have also negative impacts on mental health and stress levels, income available for other necessary purchases besides food, need and demand for public assistance, childhood development, ability to pay for health services and medicine, economic equity, and the ability to manage chronic conditions through diet.

Specially, the Wallin, A.,*etal.*,(2015) on the Impacts of a Food Tax on Food Security, Diet, and Nutrition, found out and concluded that taxing food could also have an adverse impact on food security, diet, and nutrition by prompting purchases of less food or cheaper, less nutritious food. This could have important and harmful implications for health, particularly nutrition-related chronic conditions, the ability to manage chronic conditions through diet, childhood development and learning capacity, malnutrition issues, the incidence of low birth-weight and/or preterm babies, and the need and demand for food assistance from public, private, and nonprofit sources.

Similarly, Patrick C. and Marinos .T, (2000) on their study “how tax affect the food markets” concluded that the tax systems in previous time was highly discourage food productions in the country due the facts that the introduction of taxes was increase the food price which enforce the consumer to switch their preferences to other substitute products as a result of high amount food price at that time. However, the authors, on later new tax reform, they concluded that the producers and consumers are benefited from new tax reform or elimination of some food taxes intended to reduce the price of food produced locally comparing to the food imported.

Food Prices Rising and Controlling Mechanism in Developing Country.

In most developing countries, the poor spend a very high proportion of their income on food: as much as 70% in many countries. Low income, in both rural and urban areas, are often the ones who bear the brunt of food crises as they attempt to maintain household consumption and nutrition in the face of soaring prices (Baden, 2008). Generally speaking, when food price get inflated, the income of the house-hold will be deviated to purchase food leaving another necessities behind because food is the prior necessity. Hence the majority of income is devoted to buy food, other necessities such as: education, shelter, medication, hygiene, saving, and the like will be interrupted. Typically, poor households have limited strategies in which to cope with such shocks – having little in the way of savings or access to credit to smooth consumption when needed.

In Africa, governments generally have less capacity and fewer resources to stabilize domestic prices. A numbers of factors are there that affects the price of foods in markets. For instance, the international price is could be taken as factors affect food price especially importer, mostly developing countries. Transmission of international price movements will depend in large part on ease of access to ports: those countries that are landlocked being largely insulated from world prices. Take the case of Malawi, for example, the costs of transporting maize to and from the international markets are so high that domestic prices are in most years overwhelmingly determined by the local harvest. In fact, transport costs are not the only modifier of price rises. But also, Governments can affect prices both through measures at the border where tariffs, quotas, and outright

bans may be imposed on either exports or imports. They can also influence prices in national markets through subsidies, taxes and price controls. Since world food prices began rising significantly, a lot of action has been taken by a number of countries to soften the price shocks. For instance developing countries have adopted the following measures (Mulat D, et al, 2009):

- ❖ Price controls – e.g. Cameroon rice, Ecuador on bread;
- ❖ Reduced tariffs on food imports – e.g. India wheat and wheat flour, Indonesia wheat and soybeans, Morocco cereals, Mexico maize, pulses, milk and sugar;
- ❖ Reduced value-added taxes on foods – e.g. Cameroon rice, The Republic of Congo reduced VAT levied on a range of basic imported foodstuffs and other goods from 18 to 5 percent.
- ❖ Quotas or bans on food exports – e.g. Honduras maize, Bolivia wheat, India rice, Pakistan wheat;
- ❖ Subsidies on food prices – e.g. Egypt. Etc.

Food Price Trend and Taxes in the Ethiopia

The downward trend of real food prices for the past 25 years came to an end when world prices started to rise in 2006 and escalated into a surge of price inflation in 2007 and 2008. Prices of staple foods, such as rice and vegetable oil, doubled between January and May 2008. The upturn coincided with record petroleum and fertilizer prices. For low-income and highly import-dependent countries, higher food prices and a larger import bill have become a major challenge, particularly for those with limited foreign exchange availability and high vulnerability to food insecurity. High food prices, in combination with high and volatile petroleum prices, have the potential of spurring inflationary pressures, competing for public expenditures intended for alleviating poverty or meeting MDG targets, and fuelling political unrest. Poorer households with a larger share of food in their total expenditures are suffering the most from high food prices, due to the erosion of purchasing power, which has a negative impact on food security, nutrition and access to school and health services.

Regarding Ethiopia, the country is one of the poorest countries in the world, with a per capita gross national income of less than one-fourth of the sub-Saharan average (Central Statistical Authority, 2001). It also has some of the poorest human development indicators in the world with a national poverty level at about 44 percent and more than 80 percent of the population living on less than US\$1 per day (Chu et al, 2000). It has experienced a war with neighboring Eritrea ending in 2000, as well as frequent natural disasters that have ravaged many parts of the country and hampered development plans. The economy of Ethiopia is very agrarian, in Ethiopia, food expenditure of total household income estimated to account for more than 60 percent that any increase in food price has negative effect on the wellbeing of large majorities, focusing mainly on the production and export of commodities such as coffee. Consequently, the country is particularly vulnerable to drought and the adverse effects of fluctuations in commodity prices.

Efforts by the Ethiopian government to reduce poverty are currently being supported by the IMF under a three-year Poverty Reduction and Growth Facility (PRGF) arrangement approved in March 2001. Over the last three years, public spending for poverty reduction has more than doubled as a percentage of GDP, rising from 8 percent in 1999/2000 to nearly 18 percent in 2002/03. This increase has been facilitated by a significant reduction in defense spending, as well as an increase in grants and government borrowing specifically targeted to fight poverty. Also, some African's countries have attempted to control prices and restrict private grain trade in order to keep prices low for consumers through reducing or eliminating food tariffs or taxes. For instance, Mongolia scrapped its value-added tax on (imported) wheat and flour¹⁵. The Republic of Congo reduced VAT levied on a range of basic imported foodstuffs and other goods from 18 to 5 percent in May 2008¹⁶. In Madagascar, VAT was reduced on rice (from 20 to 5 percent), lighting/cooking fuel, and possibly other primary necessity goods. Kenya removed VAT (16 percent) on rice and bread, while also Ethiopia removed VAT and turnover taxes (15 percent) on food grains and flour (IMF, 2008). These measures may have softened the price shocks but have not solved the problems yet. In developing countries, food taxes affect food prices, which matter for consumers, particularly low-income earners who spend a greater share of their disposable income on foods. So, it is also important to examine taxes effect on the food price to be clear with the cause and to come with *solutions against unintended consequences of tax on the low income earners at a time of food consumption*. For instance, Sonia Muñoz and Stanley Sang-Wook Cho (2003) tried to examine the poverty and social impact of replacing Ethiopia's sales tax with a value-added tax (VAT). To do so, paper uses the Report on the 1999/2000 Household Income, Consumption and Expenditure Survey (2001), published by the Central Statistical Authority of Ethiopia. Also, the survey covers the settled areas of the country with a random sample of 17,332 households (8,660 from rural and 8,672 from urban areas) which includes basic demographic characteristics and household expenditures. In carrying out the analysis, Lorenz curve was used to check out whether expenditure declining or not and the concentration curve for the VAT. At the same time, progressivity of the VAT for food—which is such an important expenditure component for the poor—to the progressivity of the VAT on nonfood items were checked. Similarly, the study decomposed the area of study or region into urban and rural areas and to see how

the degree of urbanization affects the results. The study indicated that, given the high share of expenditure on food by low-income households, the study were note that food expenditure is more regressive than nonfood expenditure. The study concluded that while the poor spend more on food, they pay disproportionately larger fraction of their expenditure on taxes on the food items they purchase. For rural households, the VAT is even more progressive than it is for all households, but for urban households, the VAT is regressive. As urbanization in Ethiopia is expanding at a fast pace, this regressive nature of the VAT for urban households requires additional attention in defining exempt goods, administering the tax regime, and implementing expenditure policies oriented at addressing urban poverty and inequity.

In similar way, Alemu M. etal, (2010) also analyzed Fossil Fuel and Food Tax Incidence in Ethiopia. The study was analyses fossil fuel and food tax incidence in Ethiopia in different expenditure groups of households. To do so, Suits coefficients was calculated in order to compare the degree of regressivity/progressivity. And again, authors was used Household Income, Consumption and Expenditure (HICE) survey data collected by the Ethiopian Central Statistical Agency (CSA) in 2004/05. Besides, the study presents results of distributional effects of fossil fuel and food taxes using expenditure deciles, Gini coefficient/Lorenz curve, tax burden and Suits index. At the end, the study was suggest that fossil fuel taxes in Ethiopia are not regressive rather they are progressive even if the progressivity varies across items considered. However, when we consider kerosene and butane gas in rural and urban areas separately, fuel tax burden in urban areas would be regressive unlike other fuel types. On the other hand and most importantly, the budget shares for *food* exhibit the opposite pattern. Generally, food tax burden in Ethiopia both in rural as well as in urban areas is regressive. Tax burden from public transport fuel use falls more heavily on the rich than the poor, the effect being even higher for private fuel consumption. However, in the case of kerosene, butane gas and food, the tax burden on the poor is higher than on the rich. If the policy makers want to make sure that fuel and food tax do not hurt the poor then an increase in fuel tax could be complemented with the equivalent of a tax relief or subsidy for kerosene, butane gas and food items (especially for the poor). Furthermore, Abdurahman Mohammed (2016) tried to analyses commodity and trade issues with regard to the imported and locally produced food types. He argued that the country's double digit growth over the last decade comes due to the Rapid Expanding of Grocery Sector over the countries, given due emphasis to Addis Ababa, the country's capital. As a consequence, more and more urban, middleclass consumers are turning to grocery stores, mini-marts, and neighborhood kiosks to satisfy some of the food and beverage demands. In response to this growing and anticipated future demand, the number of grocery stores has skyrocketed in recent years. Nearly all of the processed and packaged foods sold at major retail outlets are imported while also Most of the fresh fruits and vegetables produced locally. Nevertheless, the author was concluded that the consumer in the cities are highly affected from the food price due to the combination of import duties and taxes processed grocery food items is quite high, with a cumulative tax burden of almost 65 percent. Similarly, the above finding also confirmed by Alemu M. etal, (2010)'s noted as food tax in Ethiopia is regressive especially in urban areas of the country. Even more, (Ministry of Economic Development and Cooperation, 1998) concluded that sales taxation has important policy implications for the food security issue of the country. The sales tax increases the prices and limits consumers' access to basic food items and even those of the producers themselves. The report at the end tried to recommend the government to establish the costs and benefits of the current policy of sales taxation which might need further detailed study.

CONCLUSION

The aim of this work is to review document and empirical evidence that reveled whether tax have effect on food price, food price trends and underlining causes account for abnormal surge and it consequences. Hence, the reviewed evidence indicated that introduction of a tax truly increases the cost of the product which in turn may lead to a price increase which could also have an adverse impact on food security of low income earners because majority of house hold income is devoted to buy food, while other necessities such as: education, shelter, medication, hygiene, saving, and like will be interrupted and consequently push them further into poverty. In the same time, monetary expansion (e.g. Tax) considered unanimously as one of factors aggravated the price situation in Ethiopia. Therefore, there should be strategies which in turn provide opportunity to the low income earners the abilities to cope with such price crises in future. In this regard, over last few year the government has made considerable efforts to halt food price inflation, but still the extent of current level inflation has damaging effect (especially for the low income earner-house hold) unless considerable policy. Thus, it requires understanding underlining causes and well-designed interventions need to be designed. Some of possible interventions among the most common measures that has been taken by different countries include(s):

- Reduction of tariffs and customs fees on imports food. For instance, Morocco cut tariffs on wheat imports from 130 to 2.5 percent, while Nigeria slashed duties on rice imports from 100 to 2.7 percent¹². India removed a 36 percent import tariff on wheat flour, and Indonesia eliminated duties (0%) on wheat and soybeans.

- Releasing public goods and providing consumer subsidies. However, the degree to which prices are influenced on the open market depends on the amount of food stock released or made available for release onto the market, so it should be Sufficient.
- Suspension/ Reduction of VAT and other taxes of domestic produced. For instance, Republic of Congo (from 18-5% VAT), Madagascar (20-5% VAT) etc.
- Control prices and restrict private grain trade in order to keep prices low for consumers. For instance, Sri Lanka announced retail and wholesale prices of all varieties of rice, Senegal released assorted grains to the market and announced price controls, Malaysia imposed ceiling prices on rice sold to consumers and raised the guaranteed minimum price for rice growers. Some governments, including India, Pakistan, the Philippines and Thailand have also enacted harsh penalty.
- Safety net measures: Mobilizing the necessary cash or food has not been easy for poorer countries. Safety net measures include cash transfer (should be considerable efficiency and equity implications, eg mother) and food assistance measures (eg, Bangladesh provide food assistance particularly for the poorest group) aimed at increasing disposable income.

Declarations

Competing interests: The author declares that he has no competing interests.

Author's Contribution: This paper was compiled or carried out by Mesfin Yemer or the paper author himself. Since, the purpose of this paper was to review of selected literatures and empirical studies both from advanced and developing economies on taxes and its effect on food prices with special reference to the low earner household. So, at First, I tried to identify and review sufficient number of relevant research articles and reports published related on the topic. Then, I strained relevant theoretical and empirical literatures according to the fit to the objective of the review and I discarded all irrelevant literatures from further consideration. Therefore, I, Mesfin Yemer, is the only person who has made substantive knowledgeable contributions to a published paper.

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