A CRITICISM AND REVIEW ON SUBSIDIES AS AN ECONOMIC POLICY

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Abstract
This article tries to survey, review and criticize the relationship status of variables and the household costs function. More important is that, the Result show that targeting subsidy in rural and urban is different because of different expenditures share in household budget, and the same economics policy for these two household types is not correct. In general, according to the results we can say that the share of the cost of energy and transportation expenditures in rural households is higher than those of the urban households, and therefore the rural household needs more support in this regard and applying the same policies for both household types is not correct. moreover, the same targeting of subsidies for cost of food goods among such two types of households is not correct because rural households do production of foodstuff themselves and thus, it should be noted that household expenditures (budget) and the share of the cost of these goods vary for urban and rural households. Many countries implement plans and programs whose purpose is low-income class protection and increase the purchasing power in order to eradicate poverty.

INTRODUCTION

A successful reform of the subsidy regime calls for evolving a consensus among policymakers. One write-up, among several that commented upon the DP 1997, had appropriately concluded "Societies which have grown fast during the recent period have done so not because the sum total of problem solving effort has been vastly greater in any measurable sense (than ours), but because they could succeed in evolving a broad consensus on priorities".

The present paper revisits the subsidy issue but focuses on the central budgetary subsidies. In the context of subsidies, the three pertinent questions, viz., what to subsidize; how to subsidize; and how much to subsidize; are addressed here. Its main features are: (i) reclassification of subsidies within the merit and non-merit categories using information on expenditure heads up to sub-major and minor heads, where necessary; (ii) modification in the methodology of calculating depreciation costs; (iii) estimation of implicit and explicit central budgetary subsidies for 1995-96 and 1996-97; estimation of excess' subsidization by grouping goods/services into three broad categories deserving high, intermediate, and low subsidization; (iv) quantification of the scope of subsidy reduction under alternative assumptions; and (v) identification of the ways and means for subsidy reduction.

The subsidies are considered as important supportive tools of the governments, which are paid to support consumers, producers and exporters. Generally, subsides, as an economic policy, are the governmental supports which not only enable consumers to purchase goods and services by lower prices than the market prices, but also increase producers' income compared to the status without intervention (or decreased production costs). The subsidies are paid in order to achieve important goals, including:

1- Supporting the activities subject to the returns in an increasing scale (e.g. pubic goods)
2- Supporting the activities with positive external effects

3- Improving the income distribution and supporting the target groups (Paying subsidies for essential products).

However, it should be noted that subsidies payment merely does not guarantee higher social welfare and thus effectiveness of subsides on economy can be assured only when such supportive tools are used objectively. Accordingly, in present study, the experiences of Middle East and Northern Africa (MENA) countries regarding modification of subsidies payment methods-particularly in foodstuff area- were assessed by a review on historical trend of subsidies payment.

Generally, the goods can be divided into two categories in terms of subsidies payment and utilization of income groups:

1- The goods for which subsidies are paid by the government and are utilized by all income groups almost with a same amount for all groups or even sometimes contribution of high-income groups is more. The higher usage of these commodities by a person or household, the higher contribution of subsidies will be assigned to them.

2- Goods that are not subject to subsidies and, despite this, lower income groups use them more. In the case of paying subsidies on these goods, given their higher share in the basket of poor households and low-income earners than the higher ones, low-income groups in the community will benefit more from such subsidies.

Izadi, Abazari & Sargolzaei (2011), Subsidies may be assigned for several reasons, such as lowering the price level (through increasing the buyers' real purchasing power) or maintaining the production process of a given commodity. However, subsidy payments may lead to undesirable resources allocation through distorting market prices and cost of production, although these disorders can also be compensated (through external effects). The subsidy is defined as follows: the amount of the difference in the cost price (real) of a good or service along with its adjusted price to support the target group, which is paid by an authority to

not only support the target group but also to meet the authenticated expectations.

Iran is not the only country that is involved in subsidy. In Czech & Slovak Republics, subsidies have held back economic restructuring and hindered innovation, resulting in high energy intensity and low energy efficiency. Nigeria's subsidies cause inefficient energy use, and are a major burden on public finances, resulting in poor energy-sector performance. Meanwhile in Chile, the elimination of coal subsidies in 1995 was economically beneficial.

However, removing remaining oil subsidies would incur short-term economic costs (UNEP, (2004)). Subsidies studies to date also include Canada(Sawyer & Stiebert (2010)), China (Zhang & Qin (2015)), India(Clarke (2015)), Indonesia(Braithwaite, Soelaiman, Wiroyudo, Trimurdadi, Soeleman, Utomo & Rakhmanto (2010)), Malaysia((Bridel & Lontoh (2014)) , (Gerasimchuk (2012))), Norway (Aarsnes & Lindgren(2012)), Russia((Gerasimchuk (2012)) ,((Lunden, Fjaertoft & Sigra Group (2014))), Brazil(De Oliveira & Laan (2010)), Poland(Suwala (2010)), Ghana, Senegal and France (Laan, Beaton & Presta (2010)) and (Spitzy (2012)), and other studies such as: Berry & Philip(2016)), Burnett(2018)), Marika & Geruso & Mahoney(2018), Coleman(2019), Collinson & Ganong(2018), Finkelstein & Hendren & Shepard(2019), Lieber & Lee(2019), Xue & Guan & Corey & Wei & Yan(2017), Viscusi & Clayton(2017), Stojic & Mladenovic & Prentkovskis & Veskovic(2018).

LITERATURE REVIEW

When subsidies reform plan became serious, various studies have attempted to analyze the impact of this economic decision on Iranian economy through different approaches. However, the impact of elimination or reforming subsidies has long been studied in other countries. For example, Hope & Singh (1995) in their study entitled "The increase of energy carrier prices in developing countries: a case study of Turkey, Colombia, Zimbabwe, Indonesia, Ghana, and Malaysia" investigated the impact of increased energy price on variables of poverty, inflation, growth, national income, and industrial competitiveness during 1980-1990. Their results in manufacturing industrial sector indicated that except for energy-consuming industries, in the case of increased energy prices, most industries have had sufficient flexibility for substituting and notwithstanding the price of energy carriers. Their study also showed that the impact of increased prices was less than other changes.

Uri & Boyd (1997), examined the impact of increased price of petroleum and electricity on 13 productive sectors, 14 consuming sector, and 4 domestic categories using a general equilibrium model. Results of their study indicated that increased prices lead to a decrease in energy consumption by households and producers, a decrease in production at productive sectors relying on these energy carriers, a decrease in environmental destructive materials and ultimately an increase of state's gains which can be employed for refunding foreign debts and adjusting it.

Shi & Polenske (2005), by stating that with economic reform in 1978 and increase of relative prices the energy intensity has significantly decreased. Their study was indicative of the negative impact of energy prices on energy intensity, the impact of price motivation on energy efficiency growth and more sensitivity of manufacturing industries sector to increase in energy prices on energy intensity than other sectors.

Davoudi & Ashrafi (2009) in their studies on different countries of the world, show that each country employs a particular

method or a combination of several methods for paying subsidies according to its specific circumstances. However, in the region of North Africa and the Middle East, programs are similar in terms of type of subsidized goods, targeting mechanisms and subsidies amount. In general, subsidies in these countries can be divided into two categories of subsidies for energy carriers and foodstuff, however, foodstuff subsidies are an important part of social protection programs.

In spite of using different mechanisms for allocation of food subsidies, improvement of their food security was their primary goal. Subsidies in this area include a wide variety of subsidies including general subsidies (Iran and Yemen), targeted systems (Tunisia), rationing systems (Egypt and Morocco), and alternative targeting programs (Algeria and Jordan). Generally, the key issue is that subsidy costs make a significant contribution to government spending in the countries that greatly affect the resources required (taxes) and the entire economy. Examining experiences of different countries shows that governments have used food subsidies against cash payments and in pursuit of subsidy goals. This was done despite the fact that the realization of these goals through the transfer of income has enjoyed less economic distortion. Jordan, however, is no exception to this general rule, as it has been successful in the cash flow transfer program.

Manzoor, Shahmoradi & Haghighi (2010), investigated the impacts of increased energy carrier prices. Their study involved all of the goods of economy in 36 categories and all the economic sectors in 18 economic activities related to the energy. The results of their study indicated that increased price of energy carriers led to a decrease in households' welfare and the level of domestic production. Except for the upstream energy sector, other sectors faced with decreased activity level. Also, the demands of productive activities for energy as well as household's energy consumption would decrease.

Maanavi (2001), In a study entitled "Designing a Comprehensive Subsidy Scheme", explored how to pay and allocate the subsidies efficiently. The results indicate that subsidies payment in the past years have been made publicly and untargetedly, which has led to the formation of irrational consumption patterns, in particular for essential commodities and energy carriers, and on the other hand, to higher benefit of high earners compared to lower ones.

Kashi & Heidari (2004), refer to this statement which is a goal of social and economic development programs of a country. In order to achieve this goal, annual considerable amounts are allocated to food subsidies in the state budget. So, it is worth considering the role of subsidy items in the consumption basket of households. This study is an attempt in this regard. In doing so, firstly, the estimated nutritional values of urban and rural households were estimated, then the contribution of subsidy items was calculated in terms of providing food values of households. Economists believe that interest rates (or bank charges) in the banking system of a country are less than necessary. Therefore, it is proposed to increase it in such a way that the inflation rate turns into a positive figure. Such an attitude, that only pays attention to the mobilization and equipping the financial resources through increased savings in the banking system, cannot be a proper solution for capital accumulation, while the accumulation is faced with inefficiency and excessive waste of resources. The problem is that with the policy of raising interest rates, the financial resources are more equipped, but in the investment phase, due to such reasons as weaknesses in management, lack of rules and regulations and high corruption, those resources are leaking and losing their effectiveness. Consequently, the average duration of investment in the Iranian economy (the average duration of each investment

project from the beginning to the exploitation time) is even double that of the global standard, according to the official figures of the Iranian Management and Planning Organization.

Mahmoodzadeh, Sadeghi & Heidari (2012), investigated the impacts of eliminating electricity subsidy during 1995-2007 using dynamic panel data model. Their findings showed that there was a negative and significant relationship between electricity energy intensity and its price and increased price index of other inputs which led to the replacement of the electricity. Also, using obtained dynamic functions the political plan of electricity price liberalization is implemented through 2010 to 2014 assuming the steady rise in nominal prices which after the liberation of electricity prices, energy intensity decreases so that the highest reduction has happened in the first year of liberalization, and in later years, the rate of decline in energy intensity has been reduced.

By supporting private capital and directing monetary and financial resources to a system of exploiting resources through profit incentives and within the framework of capitalist standards, governments actually affect the economic growth and employment. These effects may be low or high, and depend on the state's optimal performance against private activities. However, the same governments, with their more or less intervention in the economy, are at the same time responsible for defending the private sector's activities, and their interference and involvement are applied to make the private sector productive (regardless of the exceptional and incorrect cases), which create imbalances that must be controlled by themselves as assigned. These imbalances include inflation, unemployment, technology, social expectations, investment risks and, most importantly, poverty and social discrimination.

Babaei, Dini, Raeesedana, Rafiei & Gharavinakhjavani (2001) The two main objectives of subsidies are to boost production in sectors that somehow need external motivation and their continued activity is beneficial for society and the economy. The second is to compensate the imbalances that have been arisen in the distribution of income in the process of capitalist economic life.

In the former, subsidies are appeared as a contribution to production costs and thus a part of the manufacturing investment process and they should be taken into account in such new economic calculations. In the latter case, compensating for imbalances is to secure the purchasing power, prevent the destruction of poor lives and reduce discrimination. These goals are both tools and outcomes of development. They are tools because they enhance the purchasing power and the domestic market, and the economy, like the Iranian economy, is and should be heavily reliant on this market. Also, they are outcomes because they cause poor households to some extent prevent or even upgrade labour productivity with partial compensation for deprivations.

METHODOLOGY
The Model Variables
In the study of the household costs function, the total household expenses were used as a dependent variable and variables such as costs of food, drinking and tobacco, clothing and footwear, housing, fuel and lighting, home and office furniture, health and care, transportation and communications, educational, cultural and recreational services, other goods and services are used as explanatory variables. In our model, we divide the household into two urban and rural categories, and we estimate for the two models. This article by use the MICROFIT program (ARDL method, 42 observations used for estimation from 1977 to 2019), tries to survey the variables and the household costs function. variables are presented in Table 1.

Table 1. variables and explanations

Variable	explanations
LEAC	food and beverage costs of urban households
LWEC	clothing costs of urban households
LFUC	fuel, housing and lighting costs of urban households
LTRC	transportation and communications costs of urban households
LDIC	educational, cultural and recreational costs of urban households
LFTC	costs of the family as a whole
LEAV	food and beverage costs of rural households
LWEV	clothing costs of rural households
LFUV	fuel, lighting and housing costs of rural households
LTRV	transportation and communications costs of rural households
LDIV	educational, cultural and recreational costs of rural households

The Model Estimation
In this paper, considering the existing variables, two proposed models are considered, which we will use to estimate the model. The results for cofficient household costs function is given in the Table 2.

Table 2. Cofficient of Household Costs function

Variable	Coefficient	Variable	Coefficient
LEAC	0.0921	LEAV	0.0263
LWEC	0.265	LWEV	0.2863
LFUC	0.156	LFUV	0.265
LTRC	0.153	LDIV	0.2991
LDIC	-0.0433	LTRV	0.230

Source: *Research calculations*

By comparing the urban Household Costs, these items are ranked from 1 to 4, respectively: clothing goods, energy, transportation, and foods. Considering the second rank of energy costs and its coefficient for correcting the consumption patterns of a country, optimal energy consumption management and fair distribution of subsidies, targeting the subsidies seems to be necessary. On the other hand, the third category of transportation costs reflects the significant share of this sector in the household costs and, nevertheless, the gradual increase of these costs in order to equate its subsidy leads to pollution control and consumption reduction. According to the results, the food is ranked among the goods with the rank 4, therefore, targeting the subsidies is less important than the rest of the cost. The cost share of clothing goods is totally high for households and in urban households' expenditures, the cost share of these goods is higher than the rest, so these costs play an important role in targeting the subsidies and should be taken into consideration.

By comparing the Rural Household Costs, these items are ranked from 1 to 4, respectively: educational, cultural and recreational services, clothing goods, energy, and transportation. Considering the third rank of energy costs and its coefficient for correcting the consumption patterns of a country, optimal energy consumption management and fair distribution of subsidies, targeting the subsidies seems to be necessary. Besides, the fourth category of transportation costs reflects the significant share of this sector in the rural household costs. The contribution of educational, cultural and recreational services costs for rural households is high and thus the share of the allocated expenditures for such goods is higher than the rest. Therefore,

these costs play an important role in targeting the subsidies and should be taken into consideration.

CONCLUSION AND SUGGESTIONS

Subsidies are considered as one of the most important economic instruments of the government in making supportive policies for vulnerable consumer groups. Targeting the subsidies is an assignment of the government, for which some actions have been taken since the second development plan, and even some rules have been developed accordingly. Targeting the subsidies based on cash payment given that the power of choosing and empowering the household can be one of the proper ways of paying subsidies and if properly implemented, vulnerable households will benefit most from it.

By comparing the rankings of the share of urban and rural households in paying effective subsidies to the social strata and looking at the ranking of the share of costs for urban and rural households, the cost of energy and transportation can be concluded to be appropriate for targeting the subsidies. That is applying any policy on this variable has almost the same effect on urban and rural households' budget. However, there is a difference in the share of these costs between the urban and rural households, but this difference will be ignored with the same policy of targeting subsidies for both households in the country. On the other hand, it should be noted that the share of these two expenditures in rural households is higher than those of the urban households, and therefore the rural household needs more support in this regard and applying the same policies for both household types is not correct.

According to the results, it can be seen that the cost of food goods is in the first row of the urban households' costs. but in the ranking of rural household goods, the mentioned cost is not in the ranking of household goods since such households do production of foodstuff themselves, so the same targeting of subsidies for these costs among such two types of households is not correct. It should be noted that household expenditures (budget) and the share of the cost of these goods vary for urban and rural households.

The subsidies payment to compensate the inappropriate effects of asset development and distribution strategies is vital and important. However, the co-operation of all the components of the government and the people to advance the plan. The accurate identification of vulnerable households and the share of costs from the total household cost, providing explanatory and briefing programs for recognition of the basics. The determination pricing of valuation items, the review of redistribution and compensation for losses suffered by households are crucial issues that government and policymakers need to consider and pay more attention in their policies.

Finally, by taking a glance on the share of costs in urban and rural households and given the greater share of rural household costs, the government should increase the share of rural households from subsidies. The government pay more to them by changing the contribution of household subsidies, or by applying the same payment policy, they would give the essential consumer goods to the rural households in the villages to compensate such a difference.

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