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### An investigation of the welfare losses of commodity inflation in the Fourth and Fifth Development Plans in particular provinces of Iran

Khaled Ahmadzadeh,\* Sholeh Nasri \*\*

\* Assistant professor of Economics and part-time researcher in Kurdistan Research Institute, Faculty of Humanities and Social Sciences, University of Kurdistan, Sanandaj, Iran.

Email: [ahmadzadeh.khaled@gmail.com](mailto:ahmadzadeh.khaled@gmail.com)

\*\* M.A. in Economics, Department of Economics, Faculty of Humanities and Social Sciences, Kurdistan University, Sanandaj, Iran. (Corresponding author)

Email: [shole.nasri@yahoo.com](mailto:shole.nasri@yahoo.com)

 [0000-0003-4425-1197](https://orcid.org/0000-0003-4425-1197)

Postal address: shahrak keshavarz, khordad 15 street, sanandaj, Postal code:66187-68165, Iran.

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## Extended Abstract

### Introduction:

Improving the welfare of citizens is important for governments that are attributed to the welfare state. The Islamic Republic of Iran is no exception to this rule. The first and second paragraphs of Article 43, the twelfth paragraph of Article 3, and Articles 29-31 of the Constitution and all economic development programs fully reflect of this claim. Thus, in order to achieve this, a high percentage of the country's total revenue sources have been allocated to subsidies for basic goods for many years. However, the inappropriate implementation of support policies has acted in violation of its purpose, i.e. empowerment of the low-income groups. Achieving unexpected results from the implementation of support policies made the country's officials to decide to pass a law on targeted subsidies. Research conducted on consequences of the implementation of the law on targeted subsidies shows the welfare costs resulting from rising prices, weakening of national production and the spread of unemployment in society. In addition, successive shocks resulting from exchange rate, financial and trade sanctions, and rising liquidity in the years following the implementation of the law on targeted subsidies have prompted researchers to examine the welfare losses incurred by the various income deciles, evaluate the results for proper planning and provide timely information to the country's officials and planners. Much research has been conducted in this field so far, but there have been few studies that show the difference in the cost of living in different

parts of Iran, as influenced by cultural, economic and geographical factors. In addition, the success of economic development programs in providing welfare to the low-income groups has not been studied yet. Failure of planners to attend to the welfare status of citizens by geographical areas of the country will lead to the failure of welfare programs despite spending time and exorbitant costs. The present study examines the welfare losses of commodity inflation for urban households in the western and northwestern provinces of Iran in the fourth and fifth development plans to take a step to address this shortcoming.

### **Methodology:**

In the present study, the data on price, total household expenditures and expenditures spent on the following 7 commodity groups are used: food, beverages and tobacco, housing and fuel, clothing and footwear, transportation and communications, miscellaneous goods and services, home appliances and furniture, entertainment and cultural affairs and education. These data have been extracted from the statistics on expenses and income of urban households during 2004-2015 in the Statistics Center of Iran and the price index chapter of statistical yearbooks of the whole country. The collected data are based on the linear expenditure system/model using the seemingly unrelated regression method. In this model, which consists of several equations, despite the distinction between independent and dependent variables of these equations, using the same data in them violates one of the classical assumptions (zero covariance of random error sentences) and leads to uncertainty in the estimators' results. In order to solve this problem, sur method is a suitable method for estimating the system of equations.

### **Findings:**

Findings from poverty line calculations in the first year of the Fourth Development Plan show the highest and lowest monthly poverty lines for the provinces of Kurdistan and East Azerbaijan, respectively. At the end of the plan, this situation was for Lorestan and Zanjan provinces, respectively. At the end of the Fifth Development Plan, urban households in East Azerbaijan faced the highest cost to meet essential needs, while Ilam province was in the opposite point. At the beginning of the Fifth Development Plan, however, the situation for the two provinces was quite the opposite. The ranking study shows that the compensatory changes of a few percent of the income of urban households in different provinces on average in development programs indicate the first ranks in both development programs for Kurdistan province compared to other provinces. The increase in the prices of three commodity groups of food, beverages and tobacco, housing and fuel, and health and treatment has had the greatest welfare losses in the fourth and fifth development plans for the urban areas of Ilam and West Azerbaijan provinces, respectively.

### **Results:**

In the present study, the highest welfare losses were due to rising prices of food, beverages and tobacco, housing and fuel, and health and treatment, and the result was contrary to the goals pursued in the Constitution and, in parallel, economic development plans. Thus, it is necessary to reduce the cost of food production by using new technologies with less energy consumption, which are the main input of agricultural production, but, in contrast, have faced a large increase in price after the targeted subsidies. In addition, officials need to be more sensitive to the consequences of policies that increase housing prices. On the other hand, allocating a larger share of government resources to free education and health services with a proper

distribution throughout the country will promote human capital and, consequently, improve the welfare of households.

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