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Influence of Inflation on Cost of Living among the Urban Residents in Turkey

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Abstract

Inflation is the increase in the price of products and services over some time. In some instances, inflation affects all aspects of the economy, from consumer spending, business investment and employment rates to government programs, tax policies and interest rates. The Turkish economy has experienced a reasonably high rising cost of living and unsuccessful disinflation programs within the past three decades. Thus, the study sought to examine the influence of inflation on the cost of living among urban residents in Turkey. The study used a descriptive research design. The target population included residents from Istanbul, Ankara and İzmir. A simple random sampling technique was used to get the sample size. The simple random sampling enabled any of the residents to have an equal chance to be included in the study. The sample size used was 479 people. The analysis of the data was done using descriptive and inferential statistics. The study findings indicated that inflation positively and significantly affects the cost of living. The increase in inflation increases the cost of living. The regression results showed a positive and significant relationship between inflation and the cost of living. The increase in the inflation rate increases the costs of factors of production and the burden is passed to consumers. It was noted that inflation affects the urban residents more than those in the rural areas. The high cost of living makes people more susceptible. The study concluded that inflation had increased the cost of living. The study recommended that measures be implemented to ensure that inflation remains as low as possible. The government needs to develop policies to ensure inflation does not rise consistently. The government needs to create effective macro-economic plans to cushion the poor during high inflation.

Keywords: *Inflation, Cost of Living, Urban Residents, Turkey*

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1.0 Introduction

Inflation is an increase in the price level of a good or service or market basket of items and services (Égert, 2017). Inflation rates vary across households because of disparities in spending patterns, and not all prices rise at the same rate. The increase in the inflation rate increases the costs of factors of production and the burden is passed to consumers. Inflation affects urban residents more than rural residents (Jacobs, Perera & Williams, 2019). The fluctuation in inflation rates is a problem to compute and monitor monetary policy analysis on time, and any arising uncertainty signifies the incredibility of policy decisions. Dependable inflation rate projections are essential for economic policy (Johnson, 2018). Different variables should be considered to analyze and keep track of the effect of inflation levels.

The Turkish economy has experienced reasonably high inflation and unsuccessful disinflation programs throughout the past thirty years (Ertuğrul & Selçuk, 2020). Although annual inflation was more than 99% in some years, it did not reach hyperinflation levels, although it increased stepwise over time. Inflation is considered an essential factor for a stable economy, where sustainable economic development is the primary goal of each country. Consequently, the purchasing power of cash does not stay constant, which shows the significance of inflation in the economy. Inflation has been recognized for a very long time as a result of its vibrant influence (Barro, 2018). An essential concern for lots of families is the cost they incur to acquire the products that are essential to keep a specific standard of living which is their cost of living (Fast, Williamson & Keating, 2019). The prices of most products tend to increase with time, which puts higher pressure on the cost of living.

The CPI, which determines inflation in prices, is frequently utilized to evaluate adjustments in the cost of living. Schmidt-Hebbel, Werner, Hausmann and Chang (2020) found that the CPI has risen by about 30% annually within the last years. This rate of increase has been in line with the Reserve Bank's target of maintaining CPI inflation between 2 and 3 per cent annually. O'Neill, Ralph and Smith (2017) argued that inflation that reaches 50% a month is hyperinflation. The effect of these international price increases on the cost of physical fundamentals has some impact relevant to the distributional influence of inflation. Individuals on low revenues tend to consume more than the average amount of such essentials as a proportion of their incomes (Taylor, 2018). Therefore, they are anticipated to experience higher than average inflation rates when these products rise much faster than others. A worldwide inflation atmosphere that puts pressure on crucial outcomes such as food and fuel have significant long-term effects on the living requirements of people on low and modest incomes over and above the easy consequences seen in a higher headline rate of inflation.

The conventional economic reaction of consumers to changing relative prices to move consumption away from things that have become much more costly might not be an alternative, especially for the worst off. De Vries (2018) noted that if the price of some types of non-essential commodities increases swiftly, households can switch over away from these products to spend more on various other products that are becoming relatively less costly, and thus restrict the overall increase in the cost of a shopping basket with a particular total value. This is because; eating may be a legitimate option than going to the cinema as a method of enjoying an evening. By stark

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comparison, a household spending just sufficient on food to have an acceptable diet cannot move expenditure to electronic items if they become less expensive. In contrast, food becomes extra costly without damaging their living standards (Schultze, 2019). Consuming various other commodities does not substitute for buying sufficient food. The result is that, as well as being relatively disadvantaged by an international inflation environment that raises the rates of essential products, households on low and middle incomes may likewise be much less able to adjust. Bruno and Sachs (2020) discovered that one driving factor of inflation is the rise in the production costs like raw materials and salaries. The other is a surge in demand for commodities making customers increase their desire to pay even more for an item. With those ideas in mind, standard data to gauge inflation are CPI and PCE. The PCE deflator is the recommended measure of inflation for the Reserve bank. Inflation has several causes; it is broken down into two categories: demand-pull and cost-push (Schwarzer, 2018). Demand-pull occurs when a rise in the need for products leads producers to elevate prices to make more profits.

Cost-push happens when producers increase prices because costs of production have increased. Inflation can substantially influence the cost of living, affecting everybody from ordinary individuals to organizations and the stock exchange market. The cost of living is the amount of expenditure on products or services experienced by people, together with their financial obligations, to sustain a particular standard of living (Yépez-García, San Vicente Portes & García, 2020). The spending or cost of living is figured out by people spending patterns and the prices encountered by people. Spending patterns vary with different people as the patterns are affected mainly by a person's earnings, population density, family structure and place where one stays. Price variations experienced by people subsequently vary by geographical variables (Weston, Stanton, Qu & Soriano, 2021).

2.0 Literature Review

A study by Portes (2019) noted a significant relationship between inflation, a rise in the basic level of prices and the cost of living. Headey and Fan (2018) performed research to evaluate the impact of inflation/high on the cost of living among low-income earners in Afghanistan for three years (2013-2016). The research purposes were to evaluate how the low-income earners' current financial condition has been influenced by the rising cost of living, to recognize social and economic difficulties encountered by low-income earners in the research location and to analyze the source of income methods amongst low-income earners in the location. The target population was low-income earners in the slums in the major towns. The study was based upon an example of 250 low-income earners from these slums. Data was gathered from 10 focused group discussions, interviews and non-participation monitoring. The Snowball method was utilized to find out the low-income earners. Information gathered was evaluated both qualitatively and quantitatively. The results revealed that many low-income earners had low education levels and low-paying jobs. Most low-income earners did not buy the actual products or primarily purchased in small quantities, with few purchasing in large quantities. They earned less than a dollar, had limited disposable earnings, struggled to buy essential products and stayed in hardship. According to the research results, the researcher advises that an effort should be made by the government and central bank of Afghanistan to cushion the low-income earners against the extreme economic impacts of inflation. The emphasis ought to be on enacting efficient policies to tame the rising cost

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of living and reinforce the shilling against the dollar to improve the living standards of the low-income earners and other at-risk groups.

According to Hagemann (2019), inflation is the increase in product costs and devaluing of money. It affects the standard of living. The rising cost of living has made it extremely tough for many families to obtain their basic needs that have gone beyond their purchasing power. The research focuses on the rising cost of living on the standard of living. Its primary goals are to examine the dangers of the increasing cost of living to the purchasing power of people and establish the significant aspects that lead to inflation in Turkey. The research objective was to determine the effect of inflation on the standard of living. The research looks at the dynamic interactions between the rising cost of living and the standard of living in Turkey to evaluate how the increasing cost of living affects the standard of living; the irrepressible rising cost of living has deteriorated Turkey's residents. They require a long-term solution which at the very least decreases the inflation or the increasing costs of the products. The sample size included 102 participants, which will be combined individuals of all levels of the population, such as; low, middle, and high-income individuals. It might additionally consist of some economic experts and various other associated organizations. The researcher summed up the research results and validated that inflation affects the standard of living and actual purchasing power of people. The research found that inflation within some areas is aggravating over time.

Celasun and McGettigan (2020) discovered that the inflation rate of Venezuela is high when compared with various other nations in the region and worldwide. The rising cost of living is simply the general rise in the level of prices of products in an economy. When the introductory price level increases, every unit of our money buys fewer products; for this reason, all must understand the specific nature of the association between inflation and individuals' living standards. The study investigated the impacts of inflation on the standard of living regarding costs of food and non-food things, earnings, savings, loans and entertainment over the period (2015-2018). Using stratified sampling, a sample of 255 heads of households was taken for the research in Venezuela. Structured questionnaires and interviews were utilized as tools for gathering information. The information was examined using descriptive data and a multiple regression model. From the evaluation of the report, the rising cost of living did highly influence the living standard of the residents, engaging them to obtain loans and do overtime jobs to meet their household expenses. It was also exposed that the residents' standard of living worsened from year to year, with 2014 being the lowest due to the high rising cost of living.

Das, Lahiri and Zhao (2019) conducted a study to check out the inflation rates over the period 2008-09 and 2014-015 and concluded that the rising cost of living in 2008-09 hurts the poor highly, given that the increase in food prices was considerable in these time and food make up a significant section of their overall expenditure. The study discovered a substantial increase in inflation that was noticed in the food grains such as egg, fish, and meat. Moreover, the rising cost of living growth was found to be marginal in beverages, shoes, and edible oil. Additionally, the effect of inflation on bad varied not just across rural and city areas; the result was different for various periods. The study also illustrates shifts in the pattern of inflation rate throughout the expenditure courses between 2008-09 and 2014-15 and develops an inverse relationship between inflation rate and expense in the year 2008-09 for both rural and city areas while the partnership was distinctive

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in case of 2014-15 for both rural and urban areas. The research shows that the bottom forty per cent of rural residents face the same inflation rate as their metropolitan counterparts in the year 2008-09. Ultimately, the study concluded that the effect of the rising cost of living is not only product particular but additionally decile class particular. The cost of living is noted to have disparities for rural and urban areas. These show the function of policy and government intervention through the general public distribution plan preferring the poor area to decrease the gap between the rising cost of living experienced by the poor and wealthy.

Schmidt-Hebbel, Werner, Hausmann and Chang (2020) indicates that CPI which determines inflation in prices is frequently utilized to evaluate adjustments in the cost of living. Schmidt-Hebbel, Werner, Hausmann and Chang (2020) found that the CPI has risen by about 30% annually within the last years. This rate of increase has been in line with the Reserve Bank's target of maintaining CPI inflation between 2 and 3 per cent annually. O'Neill, Ralph and Smith (2017) argued that inflation that reaches 50% a month is hyperinflation. The effect of these international price increases on the cost of physical fundamentals has some impact relevant to the distributional influence of inflation. Individuals on low revenues tend to consume more than the average amount of such essentials as a proportion of their incomes (Taylor, 2018). Therefore, they are anticipated to experience higher than average inflation rates when these products rise much faster than others. A worldwide inflation atmosphere that puts pressure on crucial outcomes such as food and fuel have significant long-term effects on the living requirements of people on low and modest incomes over and above the easy consequences seen in a higher headline rate of inflation. An essential concern for lots of families is the cost they incur to acquire the products that are essential to keep a specific standard of living which is their cost of living (Fast, Williamson & Keating, 2019). The prices of most products tend to increase with time, which puts higher pressure on the cost of living.

A study by Noland and Pack (2017) reported that inflation is the elemental surge in the costs of products and services, thus resulting in a fall in the value or purchasing power of a nation's currency. The study is set to explore the impacts of inflation on the living standard of public primary school teachers in Sao Paolo, Brazil, regarding their regular monthly income, expenses and their comparative standard of living from 2014 to 2016. Research theory was designed according to the study issue and goal. The research design was utilized to gather information by using an organized set of questions. Samples of 155 educators were picked from the population of the research. The information gathered was assessed utilizing frequency distribution and percentages. Chi-square was used to check the hypothesis; the result from hypothesis testing made the null hypothesis to be turned down while the alternative was approved. Significant findings and conclusions are that because inflation deteriorates instructors' earnings, enhances their expenses, subjects them to getting loans with high interest, forcing the instructors to take additional income-generating work to keep their everyday life, these threaten their living standard. The research advises that the salary rate must be improved though it would match the anticipated increase in the rising cost of living rate; this will assist in keeping a good standard of living for the whole classes of public primary school educators. There is a demand for the government to have an immediate and direct intervention in the prices of products, especially food products. This will help develop a secure environment for the middle and lower ranks of the teachers under research. The increase in inflation increases the cost of living. The regression results showed a positive and significant

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relationship between inflation and the cost of living. The increase in the inflation rate increases the costs of factors of production and the burden is passed to consumers. It was noted that inflation affects the urban residents more than those in the rural areas. The high cost of living makes people more susceptible.

Coibion, Gorodnichenko and Weber (2019) noted that inflation is pertinent to each economy. It provides a comprehensive view of how the economy is doing worldwide. If people are not able to obtain required basic needs because of reduced purchasing power, /her low tendency to consume increases, making it harder for the person to live well; for this reason, the standard of living dips; numerous researches have been accomplished, but the standard of living still stays abysmally low. From empirical evaluation, we discover that multiple South American nations experience reduced living standards. The instance of Peru is seemingly severe as Peru is currently the destitution capital of the globe, with over 5 million individuals living in poverty. Time series data on the inflation rate and standard of living between 2000 and 2015 was utilized for the study. Augmented Dickey-Fuller and Phillip-Perron unit-roots examinations were used to evaluate the stationarity of the data. Descriptive statistics consist of skewness, kurtosis, Jarque-Bera examination and BreuchPagan-Godfrey serial relationship LM examination, Breach-Pagan examination for heteroscedasticity and the Durbin-Watson examination. Findings suggested a long-run connection exists between inflation and living standards. Inflation exhibited an adverse and substantial impact. According to the results, it is recommended that a correct mix of fiscal and monetary policies be used to boost the standard of living in Peru.

3.0 Research Methodology

The study used a descriptive research design. The target population included residents from Istanbul, Ankara and İzmir. A simple random sampling technique was used to get the sample size. The simple random sampling enabled any of the residents to have an equal chance to be included in the study. The sample size used was 479 people. The analysis of the data was done using descriptive and inferential statistics.

4.0 Results and Discussions

4.1 Correlation analysis

Correlation analysis is a statistical method used to evaluate the strength of association between two quantitative variables. The correlation coefficient is measured on a scale that varies from + 1 through 0 to - 1. When one variable increases as the other increases the correlation is positive. On the other side, when one of the variable decreases as the other variable increases, then there is a negative association. There is no association when the coefficient is 0. The correlation results are presented in Table 1

Table 1: Correlation Analysis

		Cost of Living	Inflation
Cost of Living	Pearson Correlation	1.000	
	Sig. (2-tailed)		
Inflation	Pearson Correlation	.702**	
	Sig. (2-tailed)	0.000	0.000

The correlation results from Table 1 indicate that inflation is positively and significantly associated with the cost of living ($r=.702$, $p=.000$). This signifies that an increase in the inflation rate will consequently increase the cost of living. The results concur with Das, Lahiri and Zhao (2019), who exposed that the inflation of low-income families is more conscious of shocks in food prices, while that of stable families is much more sensitive to exchange rate and import price fluctuations in Turkey. Therefore, it is clear that inflation affects everybody in the economy.

4.2 Regression Analysis

The section included model fitness, analysis of variance and regression of coefficient. The results presented in Table 2 show the model fitness.

Table 2: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.155a	0.291	0.268	0.12545

The results from Table 2 show that inflation was satisfactory in explaining the cost of living among the households in Turkey. This was supported by the coefficient of determination, also known as the R square of 0.291. This signified that inflation explains 29.1% of the variations in the cost of living among residents of Ankara in Turkey.

Table 3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.185	1	4.185	787.26	.000b
	Residual	2.541	478	0.005		
	Total	6.726	479			

The results in Table 3 reveal that the overall model was statistically significant. The results show that inflation is a good predictor in explaining the cost of living among the households in Turkey, as the reported p-value was 0.000, which was less than the conventional probability significance

level of 0.05. Therefore, the government can work on decreasing inflation to reduce the cost of living in the nation.

Table 4: Regression of Coefficient

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.1546	.018		8.59	0.001
Cost of Living	0.2542	.032	2.524	7.94	0.004

According to the results presented in Table 4, it was discovered that inflation is positively and significantly related to the cost of living ($\beta=.2542$, $p=0.004$). This was supported by a calculated t-statistic of 7.94, which is larger than the critical t-statistic of 1.96. The results implied that when the inflation increased by one unit, the cost of living would increase by 0.2542 units while holding other factors constant. Coibion, Gorodnichenko and Weber (2019) articulated that inflation raises the cost-of-living price of commodities and lowers the chances of obtaining good jobs. This situation directly influences families' earnings and their investing capabilities.

5.0 Conclusion and Recommendations

The study concluded that inflation had increased the cost of living. The high cost of living makes poor people extra vulnerable. Inflation positively and significantly affects the cost of living. The increase in inflation increases the cost of living. The regression results showed a positive and significant relationship between inflation and the cost of living. The increase in the inflation rate increases the costs of factors of production and the burden is passed to consumers. The study recommended that measures be implemented to ensure that inflation remains as low as possible. The government needs to develop policies to ensure inflation does not rise consistently. The government needs to create effective macro-economic plans to cushion the poor during high inflation. The social protection schemes need to be enhanced and offered to the low-class groups to boost their living standards when inflation is high. Additionally, it is recommended that the government and private sector work together to stipulate affordable social services such as learning institutions and health centers to cater to young people from different backgrounds consisting of single households.

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