

The Influence of Inflation on Income, Inflation Costs, Consumption Behavior and Preventive Measures and Policies in Dili, Timor-Leste: A Case Study of Permanent Civil Servants.

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ABSTRACT

Inflation is a critical economic phenomenon that can have significant effect on permanent civil servants' income and consumption. The objectives of this study are to: 1) test the effect of inflation on income; 2) test the effect of inflation-on-inflation cost; 3) test the effect of inflation on consumption behavior and 4) to the effect of inflation on preventive measure and policy in Dili, Timor-Leste that focused on permanent civil servants. We distributed 395 questionnaires to the permanent civil servants all around Dili specially whom worked at the ministries but at the end we only obtained 345 (87.34%) questionnaires from our respondents and 50 (12.66%) questionnaires are not returned, and interview were used to collect data. SMART-PLS 4.0 was used to test hypothesis. The findings revealed that inflation had significant effect on income, inflation cost and consumption behavior while there is no significant effect on preventive measure and policy.

ARTICLE INFO

Keywords:
Inflation; Income;
Consumption Behavior;
Permanent Civil
Servants

1. Introduction

The global COVID-19 pandemic has had extensive effects on economies worldwide, including Timor-Leste. In order to mitigate the impact of the virus, the Timorese government took decisive measures to contain its spread. These measures encompassed the implementation of lockdowns, travel restrictions, and social distancing requirements throughout 2020 until mid-2021. These measures have had significant impacts on businesses, households, and individuals, especially Permanent Civil Servants including disruptions to income streams and changes in their consumption behavior.

According to Macrotrends (2023), Timor-Leste experienced an inflation rate of 0.96% in 2019, which was prior to the Covid-19 pandemic. However, in 2021, the inflation rate increased to 3.8% (World Bank, 2021). As of October 2022, the inflation rate in Timor-Leste has risen to 6.7% (Tradingeconomics, 2023). Explaining the problem's formulation should cover the following points: (1) Problem recognition and its significance; (2) clear identification of the problem and the appropriate

research questions; (3) coverage of problem's complexity; and (4) well-defined objectives. Inflationary pressures can exert a substantial influence on both income and consumption patterns, especially within certain subsets of the Permanent Civil Servants. Timor-Leste had an estimated population of around 1.3 million people (Census,2022). According to data from IndexMundi, the population growth rate of Timor-Leste in 2020 was reported to be 2.27%.

Timor-Leste's dependency on imported goods has contributed to the rising prices of goods within the country. Based on data from the Observatory of Economic Complexity (OEC), Timor-Leste's major imports consist of Refined Petroleum (\$114M), Coal Briquettes (\$40.4M), Rice (\$38.1M), Iron Structures (\$25.4M), and Cars (\$21.7M). The country mainly imports these goods from China (\$260M), Indonesia (\$249M), Singapore (\$104M), Australia (\$74.7M), and India (\$28.8M). As a nation, Timor-Leste relies heavily on imports to meet its domestic consumption demands. This dependency stems from several factors, including limited domestic production capabilities, underdeveloped infrastructure, and a small-scale manufacturing sector.

Timor-Leste is classified as a food-deficit country, relying on imports to meet 60 percent of its food needs. Agricultural productivity in the nation remains low, posing challenges to achieving self-sufficiency in food production. This dependence on imported food makes Timor-Leste vulnerable to fluctuations in global markets and exposes the country to potential supply chain disruptions (WFP,2023). In 2021, Timor-Leste faced a trade deficit of approximately 257.13 million U.S. dollars, highlighting the imbalance between the value of goods exported and imported by the country. A trade deficit occurs when the value of imported goods exceeds the value of exported goods. The trade deficit signifies that Timor-Leste's expenditures on imports surpassed its earnings from exports during that period. This imbalance can have various implications for the economy, including increased reliance on foreign goods, potential strain on the balance of payments, and the need for foreign currency to cover the deficit.

Before the Covid-19, purchasing power parity (PPP) for private consumption for Timor-Leste was 0.40 LCU per international dollars (Knoema, 2019). In Timor-Leste, one vulnerable group affected by inflation is the permanent civil servants who rely on their income that range from US\$ 115- US\$ 742 to support their families and meet their daily needs. Given their dependence on fixed salaries, any increase in prices can erode their purchasing power and negatively affect their ability to sustain their standard of living. As per the Asian Development Bank's report (2023), approximately 22.6% of the employed population in Timor-Leste earned less than \$1.90 in PPP per day in 2021.

Timor-Leste has experienced a substantial surge in inflation, skyrocketing from 0.96% in 2019 to a significant 6.7% by October 2022, with Food and Non-Alcoholic Beverages comprising a substantial 64% of this inflationary index. Notably, critical components within this category, such as Rice (17%), Vegetables (15%), and Meat (8%), have seen substantial price increases (tradingeconomics, 2023). For example, Bimoli Cooking oil's price has doubled from \$3.75 in 2020 to \$7.50 in 2023, severely eroding purchasing power. Concurrently, the minimum wage in Timor-Leste remains stagnant at a meager \$115, failing to keep pace with annual inflationary pressures, resulting in de facto wage inflation and increasingly challenging access to basic necessities.

Timorese consumers, particularly permanent public servants (PPS), grapple with constrained choices in the marketplace, forced to purchase essential items regardless of price volatility due to limited alternatives. This limitation restricts their capacity to allocate funds for savings, heightening their economic vulnerability. In Dili, the capital city, the elevated cost of living disproportionately burdens residents, compounded by high prices, constrained consumer choices, and a penchant for a

high standard of living, including cultural and social expenditures. Timor-Leste's heavy reliance on imported goods and services exposes it to fluctuations in global commodity prices and international trade dynamics. The absence of effective price control mechanisms amplifies price volatility, complicating expense management. The country's lack of diversification in domestic production, coupled with limited foreign investment and a formidable Consumer Price Index (CPI) at 122.60, exacerbates economic disparities (tradingeconomics, 2023). Given these complex economic challenges, it is imperative to prioritize permanent public servants as a key demographic group due to their stable income, even though they are disproportionately impacted by the erosion of purchasing power. The 4.86% unemployment rate in 2022 underscores the urgency of addressing these issues (macrotrends,2023). Timor-Leste's economic stability and the well-being of its citizens hinge on the need for a comprehensive and sustainable solution to mitigate the adverse effects of this crisis, elevate Permanent Public Servants living standards, and foster economic resilience and diversification nationwide.

2. Literature Review

Numerous theoretical frameworks have been advanced within the academic literature to elucidate the origins of inflation. Among these, two prominent viewpoints are the monetarist theory and the fiscal theory of price levels. The monetarist theory, introduced by Nobel laureate Milton Friedman in 1968, offers a comprehensive framework for understanding the causes and dynamics of inflation within an economy. At its core, this theory emphasizes the pivotal role of monetary factors in shaping inflationary trends, and it provides a valuable lens through which to analyze the complex relationship between the money supply and price levels. The central premise of the monetarist theory revolves around the notion that inflation primarily arises from monetary dynamics. Specifically, it posits that inflation is a consequence of an expansion in the money supply relative to the economy's capacity to produce goods and services. In simpler terms, when the growth in the money supply outpaces the growth in the real output of an economy, it creates an excess of liquidity in the market. Nigora (2002) argues that a rise in consumer demand and a subsequent rise in money supply will result in higher inflation rates.

According to Al-Hamidy (2011), the main reasons for Saudi Arabia's 2008 inflation were housing and food costs. A lot of people cannot afford to buy a new house because the price of private homes has reached unrealistic levels. Hasan & Alogeel. (2008) examined Saudi Arabia and Kuwait's inflation rates using the error correction model (ECM). Ramady (2009) argued that inflation has three effects on the economy: fiscal, political and economic. As a result of inflation, governments can feel pressured to raise taxes, people with low incomes and people in need of fixed income payments, like pensions, can suffer, and economic growth can suffer as well. Monetarist proponents argue that this surplus of money permeates through the economy, intensifying overall demand for goods and services. The heightened demand, in turn, exerts upward pressure on prices. This process ultimately culminates in elevated price levels across various sectors of the economy, resulting in inflation. Empirical investigations into the monetarist theory have consistently yielded results that support its core tenets. Numerous studies and historical analyses have demonstrated a strong and positive correlation between increases in the money supply and the incidence of inflation. These findings underscore the practical significance of the theory and its applicability in real-world economic scenarios. Link between monetary policy measured by broad money supply on the bank lending rate,

indicating that the increase in the money supply by the central bank lowers the demand for loans and thereby lowers the cost of loan, (Khan, et al., 2023).

Extensive research consistently underscores the pressing concern of income inequality, which persists as a significant issue in numerous countries worldwide. Over the past few decades, this socioeconomic challenge has become increasingly pronounced, with the gap between the highest and lowest income earners steadily widening (Piketty, 2014). This alarming trend highlights the need for comprehensive policies and initiatives aimed at addressing income disparities and fostering greater economic equity within societies.

An individual's position within the ownership and authority structure of an economic organization is a central determinant of personal income (Robinson and Kelley 1979; Proudhon 2011; Wright 1978). No definitive explanation for changes in the distribution of personal income has emerged from this extensive volume of research, and prior models of distributional trends leave considerable room for improvement (McCall and Percheski 2010; Morris and Western 1999). Several other recent studies provide evidence of an association between social class and rising personal income inequality. For example, research on executive compensation reveals a pattern of strong earnings growth for upper management (Frydman and Jenter 2010; Goldstein 2012); recent work on inequality of capital ownership suggests that it is rising (Piketty 2014); and research on economic elites indicates that earnings from financial investments have become an increasingly important source of income for this group over the past several decades (Nau 2013; Volscho and Kelly 2012). Several other studies have directly linked growth in personal income inequality to class typologies defined in terms of large occupational groups with similar skill requirements, job tasks, and career trajectories (Morgan and Cha 2007; Morgan and Tang 2007; Weeden et al. 2007).

Studies have highlighted the phenomenon of wage stagnation, where real wages (adjusted for inflation) for many workers have not increased significantly over time, despite overall economic growth (Wodtke, 2016). Research consistently finds that education is strongly correlated with higher household income. Individuals with higher levels of education tend to earn more on average (Blank et al., 1999). The gender wage gap continues to be a subject of research and policy concern. Women tend to earn less than men for similar work, and research explores the factors contributing to this gap (Blau and Kahn, 2017). Studies show that social safety net programs, such as unemployment benefits and food assistance, can have a positive impact on household income and poverty reduction (Bitler and Hoynes, 2015). Research on income mobility examines how individuals and households move up or down the income ladder over time. Findings suggest that there is some degree of income mobility in most economies (Chetty et al., 2014).

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Inflation leads to "menu costs" for businesses, which are the costs associated with changing prices. Frequent price adjustments in response to inflation can be costly for firms (Blinder, 1998). To

determine the magnitude of the price adjustment costs, we used time study methods of industrial engineering. Levy, et al (2001) and Dutta, et al (1999) have also used these methods to measure menu costs. However, unlike these studies, which focus only on the physical costs of changing prices, we are addressing all three types of costs: (i) physical, (ii) managerial, and (iii) customer costs of changing prices. As the literature on engineered work measurement indicates (Karger and Bayha, 1977), while industrial engineering time studies can be applied directly to repeated physical costs, these methods must be adapted to address the “knowledge workers” who are the primary contributors to the managerial and customer costs (Zbaracki et al, 2004).

High and unpredictable inflation can create uncertainty in the economy, which can discourage long-term investments. This can lead to lower economic growth (Fischer, 1981). Inflation can redistribute wealth and income, often unfavorably. Those on fixed incomes or with low financial assets may experience a decline in real income during periods of inflation (Dornbusch and Fischer, 1993). High inflation rates can lead to "shoe leather costs," referring to the inconvenience and costs associated with individuals frequently converting currency to avoid its erosion in value (Mankiw, 2009). Inflation can distort price signals in the economy, making it difficult for individuals and businesses to make informed decisions about saving, spending, and investment (Taylor, 1999).

Inflation erodes the real return on savings and can lead to lower real interest rates. This can discourage saving and result in reduced capital formation (Feldstein, 1982). The Phillips curve, which is exclusively associated with the capacity of conflicting claims over nominal income to create inflation. Hence suppose there exists an incomes policy or “social bargain”(Cornwall and Cornwall, 2001) that creates a conventional and mutually acceptable functional distribution of income that both capital and labor are content to maintain. This will reduce the willingness of workers to bid up wages at any given level of economic activity in an effort to translate the market power vested in them by the latter into a larger share of income.

Research consistently highlights a positive relationship between income and consumption. This fundamental economic concept, as proposed by Friedman in 1957, suggests that as individuals or households experience an increase in income, they tend to allocate more of their financial resources toward consumption. This is because higher income levels provide individuals with greater means to satisfy their needs and desires through increased spending on various goods and services. The life-cycle hypothesis, developed by Modigliani in 1966, offers insights into how individuals manage their consumption over their lifetime. According to this theory, individuals aim to maintain a relatively constant level of consumption throughout their lives. To achieve this, they adjust their consumption patterns by saving during periods of higher income and potentially borrowing during periods of lower income. This approach helps individuals smooth their consumption over time, ensuring that they can maintain their desired lifestyle.

Research indicates that changes in household wealth can significantly impact consumption behavior. For example, when the value of assets like real estate or stocks increases, households often respond by increasing their consumption levels. This is because the heightened value of these assets can serve as collateral for borrowing or provide a sense of financial security, encouraging households to spend more (Carroll, 2001). Consumer sentiment, as assessed through surveys and indices, plays a crucial role in shaping consumption behavior. Studies have shown that fluctuations in consumer confidence can have a substantial influence on individuals' spending decisions (Seater, 1993). When consumers perceive economic conditions as favorable and express confidence in the future, they are

more likely to increase their spending. Conversely, declining consumer confidence can lead to reduced consumption as individuals become more cautious about their financial outlook.

Behavioral economics research has shed light on the importance of psychological factors in shaping consumption decisions. Concepts like loss aversion and framing can significantly impact consumer choices (Kahneman and Tversky, 1984). For example, individuals often exhibit a stronger aversion to losses than a desire for equivalent gains, which can influence their spending and saving behaviors. During economic crises or periods of heightened uncertainty, research suggests that consumers tend to adjust their consumption patterns. As a precautionary measure, they often reduce their spending on discretionary goods and services and increase their savings. This conservative approach helps individuals and households' weather financial instability and economic downturns (Stephens, 2004).

Research consistently underscores central banks' role in controlling inflation through monetary policy tools, particularly through strategies like inflation targeting (Bernanke et al., 1999). Inflation targeting has proven effective in maintaining price stability. Studies have explored the influence of fiscal policies, including government spending and taxation, on inflation. Well-designed fiscal policies can help stabilize prices and manage inflationary pressures (Blinder and Solow, 1973). Exchange rate policies also play a role in influencing inflation. Maintaining a stable exchange rate can be an effective tool for controlling imported inflation (Obstfeld and Rogoff, 1995).

Preventing a spiral of rising inflation expectations is crucial, and anchoring inflation expectations through credible central bank communication can help maintain price stability (Benigno and Woodford, 2003). Additionally, research has explored the role of supply-side policies, such as deregulation and structural reforms, in addressing inflation. These policies can increase the economy's productive capacity and reduce inflationary pressures (Alesina and Perotti, 1996). Research highlights the importance of central bank independence in combating inflation, as independent central banks are often better equipped to make tough monetary policy decisions (Cukierman, 1992). Furthermore, studies have examined the role of wage indexation and bargaining structures in influencing inflation dynamics. Flexible wage-setting mechanisms can help mitigate inflationary pressures (Calvo, 1983). Recent studies by Othman, Nordin, and Sadiq (2020) suggest the importance of preventive strategies, both at the macro and micro levels, for sustainable income for the government.

The costs of financial volatility, particularly in terms of economic growth, are high, leading to underutilization of production capacity and reduced capital productivity (Loayza, et al., 2003 and Easterly, 2001). The presence of increasing returns exacerbates these effects, while financial instability can lead to cumulative losses in resources. Real exchange rates play a crucial role in determining investment, growth, and employment in open developing economies (Easterly, et al., 2001, IMF, 1998; Bordo, et al., 2002). Exchange rate fluctuations can impact tradable sectors, and appreciation pressures during periods of foreign exchange abundance may lead to de-industrialization effects. The choice of exchange rate regime in developing countries is a complex decision involving a balance between stability and flexibility (Reinhart and Rogoff, 2004). Authorities may opt for intermediate exchange rate regimes, which include an element of "real exchange rate targeting" to achieve multiple objectives (Frenkel, 2004). The management of output volatility under inflation targeting and capital mobility can lead to pro-cyclical monetary policies (Svensson, 2000).

Central banks have a crucial role in inflation control, and strategies like inflation targeting have proven effective. However, the choice of monetary policy should consider the socio-political and economic context. Central bank independence, credible communication, and flexible wage

mechanisms are essential factors. Additionally, the adoption of IT varies among countries, with diverse experiences and outcomes. The macroeconomic impact of financial volatility underscores the importance of effective policy measures. Real exchange rates play a vital role in growth and employment, and exchange rate regimes should balance stability and flexibility. Central banks play a pivotal role in achieving long-term price stability, especially in economies facing multiple objectives and challenges.

3. Method, Data, and Analysis

This research applied a mixed methods approach to investigate the Influence of Inflation on Income, Inflation Costs, Consumption Behavior and Preventive Measures and Policies in Dili, Timor Leste: A Case Study of Permanent Civil Servants. According to Creswell (2021) Mixed research methods are an approach to investigate behavioral, social, and health-related problems by collecting and analyzing quantitative and qualitative data strictly as answers to research questions, and integrating or "mixing" the two forms data in a particular research design to yield new and more complete insights or understandings than what might be obtained from quantitative or qualitative data alone.

The study conducted in Dili, Timor-Leste, during May and June 2023, centered its investigation on a specific population: the 33,000 permanent civil servants residing in the area. To conduct the research effectively, a carefully selected sample of 395 individuals from the permanent civil servant pool was studied. In another alternative that this research employed to select its sample, it used the accidental sampling method, which means that the informants were individuals who have knowledge in the respective area (Etikan and Alkassim, 2016; p. 1).

The method used in this study are the questionnaire and interview methods. Data collection was conducted through the distribution of questionnaires to the respondents and conducting interviews (Blom et al., 2020; p. 171). A technique for gathering data through oral communication between a researcher and a respondent is an interview. Interviews can be conducted in-person or virtually using tools like phones and video conferencing. Semi-structured interviews offer greater flexibility as the researcher is permitted to ask additional questions outside the set questions (Mwita,2022:533). The quantitative data collected through questionnaire and secondary sources analyzed using PLS. The sample size of 395 individuals exceeds the minimum requirement recommended by the SMART-PLS 3.0 rule of thumb, which suggests a sample size of ten times the largest number of inner model paths directed at a particular construct in the inner model (Hair et al., 2014; Andrei et al., 2017).

For testing reliability, validity, and hypotheses, we used SMART-PLS 4.0, a statistical computer package widely known for its suitability for small sample sizes (up to 30 participants), multi-variable analysis, collinearity testing, normality assumptions, and formative/reflective indicators (Hair et al., 2014; Saldanha et al., 2018, 2019). Cronbach's Alpha (CA) and composite reliability (CR) were used to test reliability (Hair et al., 2014; Saldanha et al., 2018). The convergent validity was tested using indicator loading or outer loading (OL) and average variance extracted (AVE) (Hair et al., 2017). Discriminant validity testing used Fornell-Larcker criterion (Hair et al., 2014) and heterotrait-monotrait (HTMT) (Henseler et al., 2015). Hypothesis test was carried out by using path coefficient (T and P values) observing direct and indirect effects from bootstrapping calculation (Hair et al., 2014; Hair et al., 2017; Saldanha et al., 2018).

4. Result and Discussion

The validity test is used to test the level of ability of the manifest variables in measuring its latent variables. The validity test is divided into 2 (two), namely: Convergent validity and discriminant validity. Convergent validity is a validity test that measures the extent where one indicator is positively correlated with the alternative indicator others from the same construct or latent variable. Therefore, items that are indicators of a particular construct must be unified or share a high proportion of variants (Hair et al., 2017). In the convergent validity test, researchers review the outer indicator loadings and Average Variance Extracted (AVE). As for the criteria good convergent validity, namely when outer loadings > 0.7 and AVE > 0.5 (Hair et al., 2017). In empirical research, the loading factor value > 0.5 is still acceptable. Thus, the loading factor value < 0.5 must be removed from this model (dropped). Discriminant validity is a validity test that measures the extent where a construct is truly different from another construct based on empirical standards (Hair et al., 2017). This validity test was carried out by comparing the square root of the AVE value with the correlation latent variables, as well as comparing the correlation values of the construct indicators related to the correlation value with other constructs.

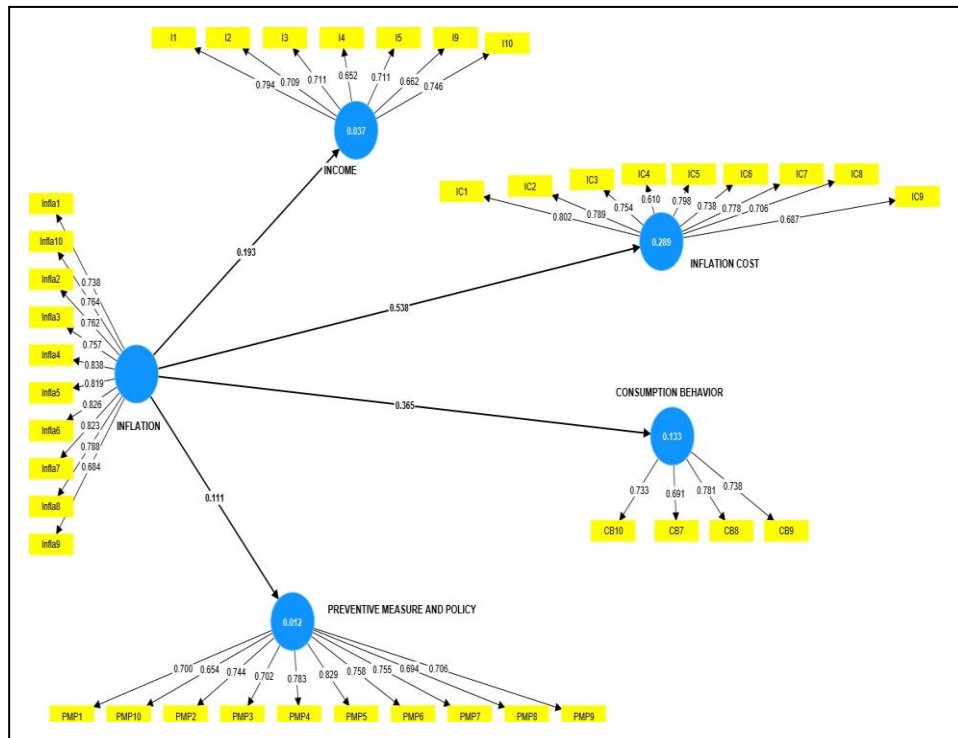
The validity test results show that the indicators have met convergent validity with a loading factor value of more than 0.70 where higher values indicate a stronger relationship. This suggests that all the indicators are relevant and contribute positively to measuring the inflation construct. Higher loading factors suggest that the indicators are more closely related to the underlying construct. Since all indicators have relatively high loading factors, it indicates good convergent validity. The demonstrates that the correlation value for the association construct is larger than for the other constructs, indicating that the model has good discriminant validity. Discriminant validity was also measured by using heterotrait-monotrait (HTMT) with the threshold values of all items below the threshold point of 0.85 (Henseler et al., 2015).

To check for internal consistency in the items, the study applies the Cronbach Alpha and composite reliability tests. Except for exploratory research, items are deemed dependable if their CA and CR values are more than 0.7. Every item has CA and CR values greater than 0.6 (Hair et al., 2014 and Hair et al., 2017). The table above demonstrates that each variable's Cronbach's Alpha and Composite Reliability values above the required threshold of 0.70. This demonstrates the acceptability of research reliability. Additionally, the Cronbach's Alpha value is lower than the Composite Reliability score. This shows that all research variables have satisfied the criteria for sufficient dependability as a foundation for SEM research that can be used and analyzed with Smart-PLS 4.0.

Table 1. T and P Values for Hypothesis Test (Direct Effect)

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Notes
INFLATION -> INCOME	0.186	0.212	0.068	2.738	0.006	Significant
INFLATION -> INFLATION COST	0.537	0.541	0.053	10.112	0.000	Significant
INFLATION -> CONSUMPTION BEHAVIOR	0.365	0.374	0.058	6.270	0.000	Significant
INFLATION -> PREVENTIVE MEASURE AND POLICY	0.111	0.130	0.099	1.116	0.264	Not Significant

Figure 1. Outer loading for convergent validity derived from Algorithm SMART-PLS 4.0



Examining how inflation affect inflation cost is the first hypothesis. According to Table results of the hypothesis test, T value (2.738), which is greater than the 1.96 minimum threshold value, and P value (0.006), which is less than 0.05, are the results. This demonstrates how the inflation affects income significant way. Therefore, the first hypothesis is confirmed. This result is supported with the key informants' points of view that highlight the public's limited control over inflation, which aligns with the statistical finding of a significant relationship between inflation and various factors such as dependency on imports goods and services.

The direct effect of inflation on income is statistically significant. This suggests that inflation is indeed a concern for the public specially for the permanent civil servants, and it affects their income, consumption behavior, and the cost of living. The interview results indicate difficulties in effectively managing the prices of essential goods and services, and government interventions may not always be consistent or effective. This supports the statistical finding of a significant relationship between inflation and income of permanent civil servants, suggesting that price fluctuations can decrease the income of the permanent civil servants. The interview results also highlight that a significant portion of the goods consumed in Timor-Leste is imported, which aligns with the statistical finding that shows a significant relationship between inflation and income. It implies that Timor-Leste's economy is vulnerable to external factors, affecting the overall cost of living.

The effect of inflation-on-Inflation cost is statistically significant. T value is 10.112 which is more than the 1.96 minimum threshold value, and P value (0.000), which is less than 0.05, suggesting that there is adequate enough evidence to conclude a significant relationship between inflation and income. Therefore, the second hypothesis is confirmed. The interview results suggest that communities in Timor-Leste are taking proactive steps to engage in agricultural activities, aligning with the recommendation to boost domestic production as a means to enhance the economy. This

corresponds with the statistical finding that shows a significant relationship between inflation and income, suggesting that income may be affected by changes in agricultural production.

The T value is 6.270 which is greater than the 1.96 minimum threshold value, and P value (0.000), which is less than 0.05, this demonstrates how the inflation affects consumption behavior significant way. Therefore, the third hypothesis is confirmed. This result is supported with the key informants' points of view that suggest disparities in how products are priced in the market, leading to variations in costs for consumers specially for the permanent civil servants. This supports the statistical result showing a significant relationship between inflation and consumption behavior, indicating that permanent civil servants 's spending habits and behaviors may change as a result. The interview recommendations regarding improving financial literacy and aligning educational curricula with market demands align with the statistical finding that shows a significant relationship between inflation and consumption behavior. It implies that financial education and relevant skills are essential for managing spending habits.

The effect of inflation on preventive measure and policy is not statistically significant. T value is (1.116) which is less than the 1.96 minimum threshold value, and P value (0.264), which is greater than 0.05, suggesting that there is not enough evidence to conclude a significant relationship between inflation and preventive measure and policy. Therefore, the fourth hypothesis is confirmed. This result is supported with the key informants' points of view that suggest a deficiency in active involvement and endorsement from the public when it comes to policies designed to curb inflation. This complements the statistical result showing that there is no significant relationship between inflation and preventive measures and policies. It implies that the public may not be fully aware of or engaged in efforts to mitigate the effects of rising prices. The interview insights suggest that the success of preventive measures and policies aimed at managing inflation may be linked to the extent of public engagement and support. This aligns with the statistical finding that shows the significance of the relationship between inflation and various economic factors, indicating that inflation does impact the economy. The interview findings emphasize the importance of government intervention in setting price standards for goods and services. This supports the statistical result showing a significant relationship between inflation and preventive measures and policies, indicating that government policies play a role in managing inflation.

Discussion

Parkin and Bade as cited in Islam (2013) defined inflation is the decline of purchasing power of a given currency over time. A quantitative estimate of the rate at which the decline in purchasing power occurs can be reflected in the increase of an average price level of a basket of selected goods and services in an economy over some period of time. As of October 2022, the inflation rate in Timor-Leste has risen to 6.7% (Tradingeconomics, 2023). The result shows that the inflation has a significant effect on the income of permanent civil servants. It's mean that when the inflation rise the permanent civil servants has suffered the consequences of the price of goods and services become more expensive. In this study we used 10 indicators to measure the impact of inflation on income showed that permanent civil servants in Dili, Timor-Leste become more vulnerable. The first one is the permanent civil servants feels that cost of essential goods and services has increased significantly in the past year and their income is remain the same.

This condition can affect their income and permanent civil servants do not have more choice to buy essential goods and services because as we know that Timor-Leste is more dependent on importation. The second is the permanent civil servants noticed a rise in the prices of groceries and

household items and they feel financially insecure with their current income level. The third is the permanent civil servants believe that inflation is negatively impacting their purchasing power and they believe that their income is insufficient to meet their basic needs. The fourth is the permanent civil servants concerned about the rising cost of housing and accommodation and they have not experienced a salary raise or promotion recently. The fifth is the permanent civil servants have experienced an increase in their monthly expenses due to inflation but they are satisfied with the overall compensation package provided by their institutions.

The sixth is the permanent civil servants have experienced the prices of fuel and transportation have substantially risen over the past year and they feel that their income is not keeping up with the cost of living. The seventh is the permanent civil servants have experienced that inflation has affected their ability to save money for the future and they are able to save a significant portion of their income for future goals. The Eighth is the permanent civil servants believe that inflation is a significant economic challenge for the country and they do believe that there are enough job opportunities with competitive salaries in their field. The ninth is the permanent civil servants agree that our government should take measures to control and stabilize inflation in Timor-Leste so they are confident that their income will continue to grow in the future. The last one is the permanent civil servants are worried about the long-term effects of inflation on the economy and they feel that their income is fair compared to the work and effort they put in. This result supported by Card (1999), Bitler and Hoynes (2015), Morgan and Cha (2007), Morgan and Tang (2007), Weeden et al. (2007), Pastore (2010), Volscho and Kelly (2012), Nau (2013), Chetty et al. (2014), Piketty (2014), Wodtke (2016), Siami-Namini and Hudson (2019).

The indicator of relationship of inflation and consumption behavior it shows significant association between inflation and consumption behavior, it shows that when the cost of goods and services increasing, this situation may affect on the permanent civil servant on their consumption. Even the prices increasing the respondents are still engage in excessive or unnecessary shopping. Since Timor-Leste lack of domestic product this may affect on managing their purchasing the permanent civil servant also been experiencing prices increasing on goods, household item, groceries, transportation fuel, and services being increasing in the last 5 years. The permanent civil servant concerns about raising cost, This situation effect on their ability to for the future and significant economic challenge for the country. This result support by the life-cycle hypothesis, developed by Modigliani in 1966, offers insights into how individuals manage their consumption over their lifetime. According to this theory, individuals aim to maintain a relatively constant level of consumption throughout their lives. Lunt and Livingstone (19910) also stated that economists and social scientists generally define savings as the residual income after subtracting consumption.

The term "inflation" describes a long-term, widespread increase in the cost of products and services throughout the economy, which reduces both consumers' and businesses' purchasing power. The demand-pull Inflation is a condition that occurs in the economy when consumer aggregate demand diverges from a variety of consumer products and services, causing the overall cost of living to rise. This phenomenon is often caused by an imbalance between total aggregate supply and aggregate demand, where the extensive pressure imposed by consumer demand on the output capacity of the supply drives the price to grow irrationally, resulting in an inflationary situation. This form of inflation is extremely typical in a monetarist economy because, in order to maximize profit margins, suppliers would cut the total output rate, leading prices to rise because consumers are willing to spend any amount of money to satisfy their demands. This is known as inelastic. The results also

show that there is a positive and significant relationship between inflation and cost inflation in Timor-Leste. Permanent civil servants in Dili agree that inflation has dramatically increased the prices of necessary products and services, reducing purchasing power, housing, lodging, fuel, and transportation. This raises the monthly expenses of civil servants in Dili, decreases discretionary spending, and diminishes the value of their savings and investments. Civil officials in Dili concur that the long-term impact of inflation on financial stability is quite alarming, because inflation produces increased monthly spending, decreased savings, and financial stress. Civil servants also agree that the government has to regulate and stabilize inflation. The results of this study are supported by previous research such as (Blinder, 2000; Karger and Bayha, 1977; Zbaracki et al, 2004; Fischer, 1989; Dornbusch and Fischer, 1993; Mankiw, 2009; Taylor, 1999; Feldstein, 1982; Cornwall and Cornwall, 2001).

The result shows that the inflation has a negative effect on the preventive measure policy in Dili, Timor-Leste. It's mean that when the inflation rise the permanent civil servants has suffered the consequences of the price of goods and services become more expensive because there is less preventive measure policy by the government. In this study we used 10 indicators to measure the impact of inflation on preventive measure policy showed that permanent civil servants in Dili, Timor-Leste become more vulnerable. The first one is the permanent civil servants feels that cost of essential goods and services has increased significantly in the past year because the government's specially the Central Bank of Timor-Leste do not have the monetary policies because our nation adopted US dollar. This condition can affect the income and consumption behavior of permanent civil servants to buy essential goods and services because as we know that Timor-Leste is more dependent on importation. The second is the permanent civil servants noticed a rise in the prices of groceries and household items and there are no fiscal policies, such as controlling government spending and increasing taxes, play a crucial role in reducing inflationary pressures. The third is the permanent civil servants believe that inflation is negatively impacting their purchasing power and the central bank's do not have power to managing money supply and liquidity, contribute to controlling inflation effectively because of the dollarization. The fourth is the permanent civil servants concerned about the rising cost of housing and accommodation and the government's efforts to promote price stability through regulation and monitoring of prices are effective in combating inflation should be done by ministry of industry and commerce.

The fifth is the permanent civil servants have experienced an increase in their monthly expenses due to inflation but we do not implement measures to enhance productivity and efficiency in the Timor-Leste economy that can help reduce inflationary pressures. The sixth is the permanent civil servants have experienced the prices of fuel and transportation have substantially risen over the past year and the government's must investment in infrastructure and technology stimulates economic growth and helps maintain stable inflation rates in the future. The seventh is the permanent civil servants have experienced that inflation has affected their ability to save money for the future and the public's trust and confidence in the government's anti-inflation policies positively influence the effectiveness of those policies. The Eighth is the permanent civil servants believe that inflation is a significant economic challenge for the country and the government's collaboration with businesses and stakeholders in designing and implementing anti-inflation measures improves their success. The ninth is the permanent civil servants agree that our government should take measures to control and stabilize inflation in Timor-Leste and the government's communication and transparency about its inflation-fighting strategies help build public awareness and support. The last one is the permanent civil servants are worried about the long-term effects of inflation on the economy and the government

continuous monitoring and evaluation of the effectiveness of anti-inflation policies contribute to their improvement and success in the future. This result supported by Blinder and Solow (1973), Calvo (1983), Cukierman (1992), Obstfeld and Rogoff (1995), Alesina and Perotti (1996), Bernanke et al. (1999), Siklos (2001) Kuttner and Posen (1999 and 2001), Svensson (2000), Corbo et al. (2001), Woodford (2003), Othman, Nordin, and Sadiq (2020).

5. Conclusion and Suggestion

Conclusion

In conclusion, this study sheds light on the effectiveness of preventive measures and policies in curbing inflation and safeguarding household income and consumption in Dili, Timor-Leste, with a specific focus on permanent civil servants. The findings underscore the multifaceted nature of inflationary pressures in the region, which result from a complex interplay of domestic and global factors.

The study reveals that while preventive measures and policies have had some impact in mitigating inflation and protecting the purchasing power of permanent civil servants, their effectiveness varies across different interventions. Monetary policy adjustments, such as interest rate changes, have shown promise in controlling inflation to some extent, but their success depends on a range of factors, including global economic conditions. Fiscal interventions, including targeted subsidies, have been more effective in providing direct relief to civil servants and other vulnerable groups.

Suggestion

Improve the collection and analysis of economic data, including inflation indices, to gain a more comprehensive understanding of inflation dynamics in Dili. Accurate and timely data is essential for informed policy decisions especially relevant institutions such as INETL and Aduaneira. Timor-Leste should continue efforts to diversify its economy beyond oil and gas, fostering sectors like agriculture, tourism, and manufacturing.

We recommend that the Comissão da Função Pública propose to the government of Timor-Leste to consider raising salaries in response to inflation. This proactive approach would help ensure that the income of the Permanent civil servants keeps pace with the rising cost of living. By periodically adjusting salaries in line with inflation, the government can provide essential financial relief to its citizens and maintain their purchasing power, contributing to economic stability and improved living standards.

Recommend to the Ministry of Industry and Commerce to create policy such as price control so all entities who are involved in importation of goods cannot increase the price as they want. Develop long-term economic plans that focus on sustainable growth and stability, taking into consideration the unique challenges and opportunities of Timor-Leste. Such plans should include strategies for reducing dependence on imports and building local industries.

Recommend to the Ministry of Agriculture and Fishery to strengthening the domestic production such as agriculture, industries, tourism and local enterprises. AFAESA to go strengthening their operations in the field to control the quality and price of the goods that sells in the market.

Recommend to the Ministry of Finance and Central Bank of Timor-Leste to improve coordination between monetary and fiscal policies to ensure a coherent approach to addressing inflation and protecting the permanent civil servant's income. Encourage further research and analysis

into inflation dynamics and policy effectiveness. Regular assessments and adjustments to policies are essential to respond to changing economic conditions.

6. Acknowledgement (if any)

We would like to express our sincere gratitude to Prof. Dr. Azevedo and Prof. Dr. Helio for their valuable guidance, encouragement, and constructive feedback throughout the research process. Special thanks are also extended to the Instituto Nacional de Ciências e Tecnologia (INCT) for providing the support and resources necessary to complete this study successfully.

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