

**Exploring Inflation and its Effects:
A Review of Teachers' Incomes in St. Thomas, Jamaica 2001-2004**

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The economy remains as fragile as ever. This is a time for wise and cautious management and for restraint by all stakeholders in the economy, which binds our interests together.

—Gleaner

ABSTRACT

This study explores the relationship between the incomes of public school teachers in St. Thomas, Jamaica and inflation rates between 2000 and 2004. It investigates how individuals adjust to potential gaps in real income and inflation as well as the consequently higher costs of living. Estimates of teachers' incomes were gathered through a survey. The work also investigates the general awareness of inflation increases and measured the effects of high inflation on teachers. Moreover, the failure of wages to keep up with inflation over the past years has resulted in increased migration rates of teachers from Jamaican (brain drain), which will decrease the quality of Jamaican public schools, and lower the future productivity levels of Jamaican workers. This research adds to the debate over what macroeconomic policies are more appropriate for the Jamaican economy, and possibly for others third world countries. In third world countries like Jamaica, wages typically do not fully adjust to inflation. This lack of adjustment has had an extremely negative effect on the real incomes of teachers of Jamaica, and it is likely that similar negative effects extend to the entire general population.

Introduction

Jamaica has a mixed economy with state enterprises alongside private sector businesses. Major sectors of the economy include agriculture, mining, manufacturing, tourism, and financial and insurance services. This study explores the interaction of inflation and incomes in Jamaica. It also examines the time period from 2001 to 2004 to see if the nominal incomes of teachers in St. Thomas Jamaica adjusted to accommodate inflation. Many researchers have investigated the causes of inflation in Jamaica, but few have discussed the impacts of inflation on the wages of particular groups. This research assesses the problems with having gaps between inflation rates and real income increases. It also highlights the importance of having wages adjust to keep up with inflation. Background studies lead us to expect that incomes have not been keeping up with the inflation rates. Jamaicans were surprised by the effects of sharp increases in inflation rates coupled with the limitations placed on wage increases imposed by the International Monetary Fund (IMF) during their implementation of structural adjustment policies (SAPs) created for Jamaica.

Defining Inflation

Inflation occurs when the nominal prices of the majority of goods and services in the economy rise (Obstfeld 1997). In most societies, wages are set by long-term contracts, and therefore do not change instantaneously when changes in the money supply and price level occur. Although wages do not enter price indexes directly, they are large portions of the costs of production. Major factors currently affecting the inflation rate in Jamaica include: Government Consumption Taxes (GCT), fluctuations in the foreign exchange rates, fuel rates, utility rates, minimum wages, food, bus fares, taxi fares and tuition fees. According to the Phillip's curve theory, if everyone expects the price level to rise in the future, this expectation will increase the pace of inflation now (Obstfeld 1997). In addition, workers bargaining over wage contracts would demand raises to counteract the effect of their real wages falling behind the anticipated increase in prices. However, in practice, this theory has not applied well to economies like Jamaica.

History of the Jamaican Economy

Jamaica has a serious debt problem due to the large amount of loans the government has accepted from the IMF. Under different Jamaican governments, the IMF has set up a series of structural adjustment policies (SAPs) as part of the requirements for obtaining funds. According to Le Franc, these policies have been the main reason for inflation increases in Jamaica (1994). The phrase "Structural adjustment" describes a package of economic reforms theoretically designed to stabilize economies in hardship. LeFranc criticizes these policies due to the hindrances of growth they cause, as well as the social and environmental costs associated with them. Other critics feel the policies are inadequate for the developing world. Examples of the policies include devaluing currency and encouraging foreign investment.

In the 1970's, the oil supply instabilities (Arab-Israeli war) of this time period badly impacted Jamaica because Jamaica does not produce any oil. Hence, Jamaica's import costs of oil increased by 100 million dollars per year, making inflation rates soar and causing the government to look for sources of capital (Stephens and Stephens 1986). Due to these unstable inflation rates along with other unstable economic factors, Jamaicans, with their capital, left the country at faster rates. As a last economic resort to stabilize the economy, the Manley government agreed to IMF demands to create a plan to make the country more self-reliant. However, in the long run, the IMF plan has been detrimental to the economy, making it more dependent on developed countries.

Current Views of the Inflation in Jamaica

Although in 1995 Jamaica terminated eighteen years of borrowing from the IMF, inflation has still been rising. According to the Governor of the Bank of Jamaica high inflation persists because of depreciations in the foreign exchange rate, changes in government spending, as well as increases in local transportation costs. Interestingly, the Planning Institute of Jamaica (PIOJ) sees the depreciation in the value of the Jamaican dollar positively effecting growth since "sectors involved in exports can be more competitive." (Gleaner 2003). However, it is questionable that this benefit outweighs the negative impacts depreciation has on an economy.

Jamaican government expectations of inflation are contrary to recent trends in inflation rates. For example, The Minister of Finance and Planning, Dr. Omar Davies predicted the status of inflation in 2004: "We expect inflation to be moderate this year on the back of currency stability..." (Gleaner May 2004). In actuality, Jamaica's rate of inflation exceeded government targets to a level of 13 percent during the beginning of the 2003-2004 fiscal year (Caribbeannews.com 2004). Hence, the government's predictions were inaccurate. According to the Statistical Institute of Jamaica, inflation rose because of "sharp increases in food and drink prices as well as a weak Jamaican dollar and the effect of a new tax

package.” Further contradicting the expectations of the Jamaican government, the Economic Intelligence Unit (EIU) predicted “a decline in inflationary pressures from early to mid-2004.” Therefore, the Jamaican government should try to anticipate its inflationary status more accurately in the future.

Literature Review

Malaki identifies the key sources of high inflation in Jamaica: oil shocks in the 1970’s, the 1980’s adjustment and stabilization program, and the devaluation of the Jamaican dollar (1994). Malaki also discloses how high inflation rates caused a decrease in real wages, consumption, and savings and capital accumulation. However, his study does not elaborate on any working class groups greatly impacted by inflation. Moreover, this study does not investigate inflation’s connection with incomes in the economy. This study examines those issues.

Stephens and Stephens (1986) reveal that the IMF forced Jamaica to implement a strict income policy, which limited total increases of wages, fringe benefits, and overtime to 15 percent per year, despite a projected inflation rate of 40 percent. These authors as well do not expand on the effects of incomes not adjusting with increases in inflation.

According to the Gleaner, a potential negative side of wages adjusting with the price levels (inflation) is slow growth since there will be increased inflation (2003). Simultaneously, one of the proposed benefits of the government keeping inflation rates low and regulated is the greater predictability of the spending power within negotiated salary increases (Gleaner 2003). The Gleaner analysis lacks insight of inflation’s negative impact on local workers. My study however, will highlight key priorities of keeping inflation low, such as allowing people to purchase more goods for reasonable prices.

In her study, Lundy emphasizes, “insights into what local people perceive as the effects of SAPs have often been missing from impersonal accounts offered by quantitative research” (Lundy 1999). This point is an incentive to add qualitative aspects to this research to gain perspectives from effected individuals. These perspectives are often overlooked when making SAPs. Lundy argues that SAPs, in countries like Jamaica, imposed by the World Bank and IMF have failed to increase economic growth and resulted in decreasing levels of human welfare (Lundy 1999). Her perspective is seen through analyzing incomes’ adjustment with inflation in Jamaica since inflation there is largely due to the effects of the SAPs from the IMF and World Bank.

Methodology

In the parish of St. Thomas, Jamaica, random surveys were used to measure the effect of inflation on teachers and to allow a determination as to whether inflation was adjusting with nominal incomes. For two weeks, teachers from early-childhood, primary, junior high, and high schools were surveyed. Sixty teachers were invited and thirty-one responded. In addition, two economists were interviewed. They gave information about general incomes and inflation increases in Jamaica, as well as the effects of SAPs imposed by the IMF. Lastly, information was also gathered from the Statistical Institute of Jamaica about inflation and incomes from the past two decades. Their resources were used with the intention of gaining supplementary information. Along with their information, the daily papers also provided helpful supplementary information.

Results—Demographics

Many teachers I interviewed had to commute to work. One can see the impacts of inflation by analyzing transportation costs. An example is when gas prices increase. When this happens, taxi drivers have to pass

these increased costs onto their consumers. Hence, taxi fares rise and people, like the teachers, have to adjust to these costs.

Unexpectedly, the majority of people surveyed were women (64.5%). Since more women than men are in the data, results might be skewed since incomes varied by gender.

Table 1: Progress of St. Thomas Public School Teachers Incomes 2001-2004¹				
Conversion of Teachers Salaries in U.S. Dollars ²				
	2001	2002	2003	2004
Median Income	7,912.97	8,105.89	7,778.16	8,194.03
Min Income	1,731.98	2,462.55	2,060.44	1,966.57
Max Income	13,855.81	15,185.72	13,736.26	13,765.98
Exchange Rate	\$1.00 US = \$46.19 JMD	\$1.00 US = \$48.73 JMD	\$1.00 US = \$58.24 JMD	\$1.00 US = \$61.02 JMD
¹ These figures are from self-reported incomes converted from Jamaican Dollars.				
² Exchange Rates used to convert currency from Statistical Institute of Jamaica records 2001-2004				
Table 2: Percent Changes in Inflation and Incomes between 2001-2004				
	2001	2002	2003	2004
Percent change in Real Wages	————	3.46	3.7	-4.29
Percent Increase in inflation	————	-17.04	93.1	-0.7
Yearly Inflation Rates ³	8.8	7.3	14.1	14.0
³ Rates from the Statistical Institute of Jamaica				

The incomes in Table 1 come from teachers in all levels of schools. Many incomes differed since some teachers have more “subjects” (credentials) or seniority than others. Also, men tended to report higher earnings than women, especially if they had more seniority than them. Incomes also depended on which level of education they taught. Because of all these differences, the minimum and maximum of annual incomes are included so that one can see the range in data.

The 2003 income decrease in U.S. dollars is the result of the Jamaican dollar depreciation. As the exchange rate decreases between Jamaica and U.S. currency, the purchasing power of teachers’ incomes also decreases. This is possible even though their incomes might increase nominally. Hence, they are more constrained by their income than before the exchange rate decreased.

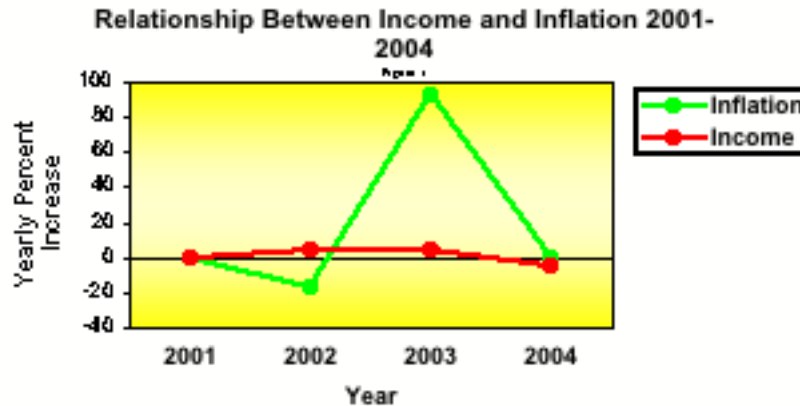


Figure 1 shows that inflation exceeded income between 2002 and 2004. Income remained fairly stagnant and did not increase. In fact, income decreased. This graph is evidence that gaps exist between teacher’s incomes and inflation. A junior high school teacher elaborates:

Being a college graduate has not helped me to become financially independent. Although I earn more, my standard of living has fallen. I forego many things to educate my only child at the University. My desire to continue my studies is unattainable because there is no money to fulfill my dreams.

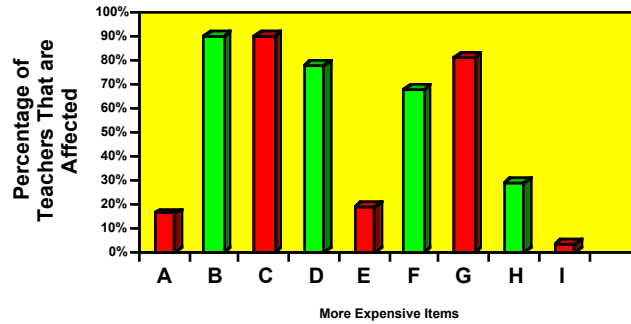
Even when income exceeds inflation, teachers still struggle financially since they are underpaid. This type of information reveals the struggle teachers endure as their incomes do not adjust with inflation. It is difficult for St. Thomas teachers to manage their limited finances.

After knowing of the difficulties in this field, one might wonder why teachers keep teaching. An early-childhood teacher comments: “Even computer literacy for example, does not provide another job that accommodates this skill. So you must have passion to be a teacher because the money is not good enough alone.” Over 95% of the teachers I interviewed had not changed jobs in the last four years. Even with minimal wages, some teachers still take pride in their work and enjoy educating their students. In order to maintain the joy many find in teaching and also economically survive, many teachers find ways to earn supplementary income. Another teacher explains to me: “Many teachers have alternative methods of earning income such as selling products from their house, owning clothing stores, or a food business...” These teachers are very creative in finding additional sources of income. They recognize they need extra money, and multi-task ingeniously, thus allowing them to meet their basic needs and continue the job many of them love.

Teacher’s Assessment of Additional Costs

How has Inflation Affected Teacher's Expenses?

Figure 2



A= Had to get money from abroad	16%
B= Food more expensive	90%
C= Transportation more expensive	90%
D= Education Costs more expensive	77%
E= More people had to work in the household	19%
F= Housing more expensive	68%
G= Utilities more expensive	81%
H= Other comments made	29%
I= No comment	3.22%

Figure 2 reveals that food and transportation are hardest to obtain with high inflation. Also, utility costs increased significantly. An early-childhood teacher comments on the situation: “When gas prices increase, transportation fares do too, making everyone affected. Taxes add extra costs too. My light bill increased by 20%, but my wages did not.”

Other factors such as health, entertainment, and vacation expenses were also commented on. Several comments from teachers make this point: “I cannot afford many things anymore such as medicine and vacation... Health has shown a significant increase for doctor visits and prescriptions.... “ Exploring the impact of monopolies would have been another useful element to as well. One high school teacher stated: “There are too many monopolies in Jamaica, so we do not have the option of buying cheaper products when prices increase...” Monopolies appear to be negatively impacting teachers. Exploring working conditions might have been useful as well. A junior high school teacher reflects: “For our working conditions, more output is required for poor wages being paid.” She truly feels teachers are overworked. It was surprising to see that money from abroad was not a major resource for Jamaican teachers. In articles from the *Gleaner* and also in statements from university professors, remittances are pointed to as a main source of financial help.

Monitoring Inflation and Exchange Rates

The teachers interviewed have mixed responses about whether they monitor inflation and exchange rates. Fifty seven percent of teacher monitor the inflation rates and about seventy seven percent monitor the exchange rates on some regular basis. People who monitor the inflation rate and the exchange rate generally do so because they want to be financially prepared for the future. They would rather seek another source of income in advance than at the last minute. Another teacher explains: “I have now taken a part-time job... My income cannot cover my expenditure...I am going down the poverty level.”

People who do not monitor inflation and exchange rates are often pessimistic about the future of the economy. Hence, they expect no economic improvements. In a sense, all people are preparing for the worst in different ways.

Teachers Feelings About Income Changing With Inflation

Sixty five percent of teachers realize their income has not changed with inflation rates. However 23% believe opposite. Some teacher's explain why they feel as if their income has not increased with inflation:

“Necessities have become more expensive...”

“Inflation is higher than salary raising.”

All of these teachers are affected at different levels. Other teachers explain why they feel as if their income has been adjusting with inflation:

“It now takes more money to purchase the same amount of goods.”

“It reflects in the salary.”

It is possible these perspectives are developed from misunderstanding the questions or being deceived nominal figures of income instead of understanding the real figures of income.

Conclusion

The evidence from this research demonstrates that inflation has exceeded teachers' incomes between 2001 and 2004. Initially, incomes and inflation were around the same rates. However, in 2003, inflation soared to a high level, far beyond income. Now, incomes continue to fall below inflation rates. The statements from teachers as well as the quantitative data disclose that the increases in inflation have negatively impacted teachers. They cannot afford their basic needs. Inflation, combined with the lack of increases in wages has caused teachers to acquire second and third jobs and reduce their standards of living. High inflation in Jamaica has caused most teachers to monitor these rates frequently, in order to prepare for future hardships.

The implications of my research suggest the government should consider the augmented effects of their policies before instituting them. According to the standard growth model in economics, improvements in technology and education are the only ways an economy can become more efficient in the long run. Hence, it is in the government's best interest to improve the salaries of teachers to maintain the quality in their schools. Although it might face continuous pressure to accept loans, the government should also avoid borrowing money from institutions that impose unreasonable economic policies on the country. Moreover, inflation can be controlled in several ways. One would be to increase exports, particularly the non-traditional ones. This act could be pursued with the intention of gaining foreign exchange currency to finance required imports and reduce deficits. Imports are important to manage because if an economy is excessively importing, their economy is subject to the inflationary fluctuations from the countries it imports from.

In this study, the information is limited to a single parish, and single working group. Future researchers can expand the scope of a study like this by extending the working population to farmers, doctors, engineers, lawyers, hotel managers, and so forth to further expose the effect inflation has had on people. Yet another study could analyze the effect monopolies have on Jamaican consumers, especially when inflation rises. It would be useful to also analyze how many college graduates continue to teach in public schools over a period of time in relation to their wages. One can also investigate migration rates of

highly qualified teachers, decreases in the quality of schools, and future productivity of students who come from these schools. Income disparities by gender are another overlooked focus.

Many studies exclude viewpoints of their subjects because they feel official documents reflect the common voices. Since the perspective of the masses are overlooked at times, it is important the researcher is aware of their views to add great insight and to his or her research.

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