# AN EVALUATION OF THE EFFECTS OF HYPERINFLATION ON CAPITAL BUDGETING: A CASE STUDY OF NATIONAL FOODS HOLDINGS LTD (NFHL)

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#### **ABSTRACT**

This study was motivated by Zimbabwe's unstable economic environment because of hyperinflation and the effects that it has had and is still having on the economic sector's operations, specifically the manufacturing sector. The purpose of the study was to identify the capital budgeting techniques that are most effective in a hyperinflationary environment. The study adopted a mixed research methodology. The sample size for the research was 34 staff members at NFHL from the finance and accounting department and probability sampling was used. Questionnaires and interviews were used as the research instruments. According to the financial data analysed for the prior financial periods, the company has a strong liquidity and strong profitability but however, knowledge of the macroenvironment is not being adequately put at the disposal of the employees at the entity. The researchers recommends that the finance staff at HNFHL must have in-depth knowledge of the basic elements in capital budgeting and establish a well-defined feedback system to ensure the effectiveness of capital budgeting system in a hyperinflationary environment.

**Keywords:** Hyperinflation, Capital Budgeting, Finance, Manufacturing Sector.

#### 1. BACKGROUND OF THE STUDY

Inflation in Zimbabwe dates back from the late 1990s to the adoption of multi-currency period of April 2009. With an inflation rate of 48% in 1998 and as high as 79.6 billion% in November 2008, prices began to spiral out of control. In 2008, the government issued a 100 trillion Zimbabwean dollars note, however it was insufficient to pay for a loaf of bread. From 2009 the economy gradually improved because of decreased inflation since more stable currencies were being used and eventually stability was reached (O' Neil, 2021). During 2014 to 2015 Zimbabwe was now facing a shortage in foreign currency particularly the US dollar and the following year 2016 the bond notes were introduced as a temporary solution to reduce the cash shortage. During this period, Zimbabwe was experiencing a slowly increasing inflation rate until it got into another phase of hyperinflation in 2019, which is the current phase, where it surged up to a high of 837.5% in July 2020 and is still going up as of current.

Using National Foods Holdings Ltd. as a case study, the study attempted to demonstrate how hyperinflation affects decisions regarding capital investments. Zimbabwe-based National Foods Holdings Ltd (NFHL) is a business that produces and sells food items. The business, which was founded in 1920, is divided into the Milling, Manufacturing, and Distribution sector and the Properties segment. Due to the manufacturing nature of its business, the large food manufacturer must regularly invest in capital assets and properties. This study aims to demonstrate how National Foods Ltd.'s capital investment are influenced by economic inflation.

The decisions taken here have a significant impact on the company's future worth because capital purchases often require considerable financial outlays (Yusnaini, 2023).

#### 2. EMPIRICAL REVIEW

2.1 How does hyperinflation affect entities investments choices

### 2.1.1 Capital decision-making and Inflation

According to Collin (2022), when choosing an investment, inflation must be considered m because it might change the value of future returns. Increased inflation, for instance, would lead to the underperformance of some asset classes exposed to fixed long-term cashflows since the purchasing value of those future cashflows decreases with time. However, assets with more adaptable cash flows may perform better and provide inflation protection. According to Chihambakwe (2022), inflation has a varying impact on various asset classes. For instance, investments with fixed long-term cash flows will lose value while those with more flexible cash flows may perform better. Fixed income and cash and cash equivalent items are the typical victims of increasing inflation. In an inflationary environment, commodities, physical assets like real estate or infrastructure, and some stocks may fare well.

When deciding whether to do the analysis in nominal or real terms, the analyst must account for inflation because real cash flows are adjusted downward to account for inflation whereas nominal cash flows are not (AnalystPrep 2021). Discounting nominal cash flows calls for a nominal discount rate, whereas discounting real cash flows calls for a real discount rate.

The correlation between actual and nominal rates is seen below.

(1+Nominal rate) = (1+Real rate) (1+Inflation rate)

According to Cheruvu (2021), a company's after-tax cashflows will improve or deteriorate depending on the current rate of inflation depending on how revenues and costs respond to changes in inflation. Except that they typically increase in value less over time, liquid assets are affected by inflation in the same ways as other asset types. As a result, liquid assets are generally more susceptible to the damaging effects of inflation. In terms of the overall economy, people and corporations typically keep fewer liquid assets when inflation is higher. Illiquid assets are likewise impacted by inflation, according to Segal (2022), but they have a built-in defense if they increase in value or produce interest. Most workers invest in stocks, bonds, and mutual funds primarily to protect their savings from the consequences of inflation. When inflation is sufficiently strong, people frequently invest their liquid assets in assets that pay interest or use the liquid assets to buy products. Therefore, by investing in a variety of inflation-protected securities like inflation-indexed bonds or Treasury Inflation Protected Securities (TIPS), one can safeguard their buying power and investment returns (over the long term). These assets are resistant to inflation risk because they fluctuate with inflation.

The volatility of relative prices also plays a role in optimal asset selection, Shorter-lived assets have a higher option value than longer-lived assets because the opportunity to switch between alternative technologies arrives sooner. Therefore, higher uncertainty about future relative asset prices increases the breakeven price of a short-lived asset relative to a long-lived asset. Macro-economic instability has necessitated that expectations about the future rate of inflation be taken into consideration in making decision(s) about which capital projects will be undertaken by the firm. Nominal cash flows determine its degree of profitability. However, in making the capital budgeting decision both real and nominal concepts must be considered (Rendahl, 2022).

Kumar (2023) states that as most of the investment decisions are based on the concept of cash flows, there is every need to adjust the money cash flows with purchasing power equivalents to determine the real cash flows or inflation adjusted cash flows. However, if there is zero inflation, there is no need to distinguish between money and real cash flows as both would be identical. The difference between money cash flows and real cash flows arises when there is inflation.

#### 2.1.2 cost of capital and inflation

The minimum return that would be required to justify starting a capital budgeting project is known as the cost of capital (Hayes, 2022). It is the necessary rate of return for the different forms of funding. Due to the different financing options available for investments, businesses frequently employ the overall cost of capital, which is based on the expenses of the firm's equity capital, debt, and preferred stock. Preferred stock is not widely used now owing to hyperinflation because it cannot increase in value against the devouring inflation. Konstantin (2018) suggests that businesses need to be aware of the impact of inflation on their weighted average cost of capital in order to take steps to mitigate the risks. When inflation is high it can erode profits and make it difficult to maintain a positive cashflow. As a result, businesses may need to raise prices to cover their increased costs, which can lead to lower sales and lower profits. In addition, investors will require a higher return on their investment to compensate for the increased risk, which will result in a higher weighted average cost of capital.

Conventional wisdom says that businesses adjust their investment spending according to changes to cost of capital because more projects become worthwhile as funding cost go down, while few make the cut down when capital is expensive. If central bankers want to boost investment to encourage economic activity, convectional theory suggests they should lower interest rates which therefore reduces cost of capital for those firms using debt funding (James, 2022).

### 2.2 The advantages of effective capital budgeting

A corporation can better comprehend the risks associated with investment opportunities by using a capital budget, and how these risks affect the company's financial results. Therefore, a company can select a technique/method from the many capital budgeting strategies to determine whether it is financially advantageous to take on a project or not (eFinance Management, 2023). This aids the corporation in estimating which would produce the best possible return. Khan (2022) makes the case that the capital budgeting method aids in facilitating resource allocation. It enables companies to make the best use of their resources. This involves utilizing them in a profitable and effective manner. It serves as a foundation for performance assessment as well. Businesses can use capital budgeting to determine whether an investment will be profitable in the long run. It can assist companies in locating and resolving any issues that may arise.

According to Dheeraj (2023), Capital Budgeting controls project expenditure as it focuses on minimizing the expenditure of investment projects. While examining the investment proposals, it ensures that the project has an adequate amount of inflows for meeting out its expenses and provide an anticipated return. Effective capital budgeting avoid over and under investment of funds in a business. Managers use capital budgeting techniques to determine the appropriate investment amount for the business. The right amount of investment is a must for every business for earning better returns and avoiding losses. Capital budgeting analyses the firm capability and objectives for determining the right investment accordingly (Srivastav, 2023). Other benefits of capital budgeting are that it assists the company to make long-term strategic

investments, it also aids in the making of an informed decision about an investment considering all possible alternatives and it helps a company in a competitive market to choose its investments wisely.

## 2.3. Tactics businesses can use to control and make wise investment decisions in an inflationary environment

Bias is introduced if nominal cash flows are valued at the real rather than the nominal cost of capital, inflation in projecting cash flows must be included in a discount rate that includes inflation (Sather, 2020). A firm must utilize investment appraisal methodologies that consider the time value of money as well as the impact of inflation on cashflows since nominal cash flows must be treated with a nominal cost of capital while real cash flows are treated with a real cost of capital. These include NPV (Net Present Value), IRR (Internal Rate of Return), Profitability Index (PI) and MIRR (Hanks, 2023). Fernando (2023) defines discounted cash flow (DCF) as a way of valuing an investment that determines its worth based on its anticipated future cash flows. Using estimates of how much money an investment will make in the future, DCF analysis seeks to evaluate the value of an investment today. To account for the time value of money, predicted future cashflows are stated in present values (Segal, 2022).

## 2.3.1 net present value (npv)

Hill (2020) defines net present value as the present value of all future cash flows associated with a project or investment that are greater than the initial investment. Future cash flows are discounted at the firm's cost of capital, which is then adjusted for the unique investment risk. Decisions on capital budgeting should explicitly account for inflation, which is a fact of life (Shim, 2023). Current cash flows, or real cash flows, are cash flows that have not been adjusted for anticipated inflation. Money cash flows, or nominal cash flows, are cash flows that have been increased to account for anticipated inflation. The term "money cash flows" refers to predicted flows of money when inflation is considered (Kaplan Financial ,2020).

Kawser (2023) asserts that the inflation component is considered while calculating the weighted average cost of capital (WACC), which is used to calculate net present values (NPVs), and when calculating internal rate of return (IRR) or modified internal rate of return (MIRR), which is used as the hurdle rate. As a result, the cost of capital component of a capital budgeting accounts for inflation. Ignoring inflation will have a substantial impact on the decision because the NPV is the tool to evaluate the project using future cash inflow (Accountinginside, 2023). The analysis clearly demonstrates that inflation impacts must be considered when analyzing projects, with the optimal method being to incorporate inflation effects right into cash low estimates.

While NPV calculations are helpful for assessing investment opportunities, the procedure is far from flawless. Although NPV is a helpful starting point, there are certain drawbacks to utilizing the NPV calculation, thus it shouldn't be the only statistic an investor uses to make investment decisions. The choice of a discount rate is necessary for NPV calculations; if the incorrect rate is chosen, the results may be erroneous. Additionally, it's possible that the investment's level of risk will fluctuate during its time horizon (Gallant, 2021).

#### 2.3.2 Internal rate of Return

IRR, according to Gaille (2018), is the interest rate at which all cash flows from a project or investment have a net present value of zero. Positive and negative cash flows are a part of IRR. It is employed to assess the allure of a particular enterprise or investment. Investors are

informed that an idea should be avoided or rejected if the IRR is lower than the required return rate. Along with figuring out a project's Net Present Value, one must also compute the internal rate of return that the project will generate. Internal rate of return (IRR) method, like the net present value method, considers the time value of money (Nwakaeze, 2021). By comparing the internal rate of return to the minimum needed rate of return for the company, it evaluates an investment project (Javed 2022). Finding the discount rate at which the Net Investment amount is equal to the sum of all cash inflows' present values, or when Net Present Value = 0, yields the Internal Rate of Return.

IRR, however, simply compares the cash flows to the amount of capital being injected to produce those cash flows when comparing multiple projects; it does not consider project size or scope (Akers 2019). The IRR method's objective is to calculate the anticipated cash flow from the capital infused; it does not consider potential costs like fuel and maintenance costs that fluctuate over time. Future profits may suffer because of this. Because it assumes that future cash flows can be invested at the same internal rate of return, IRR has several limitations, but this is its biggest one. The figures produced by IRR can be rather high.

### 2.3.3 Profitability Index

The profitability index rule, according to Potters (2021), is a method of decision-making that aids in determining whether to move forward with a project. The index itself is a computation of the project's potential earnings. The general guideline is that if the profitability index or ratio is greater than 1, the project should move forward. If the profitability index or ratio is less than 1, the project should be scrapped. A project, for instance, with a \$1 million initial investment and a \$1.2 million present value of future cashflows would have a profitability index of 1.2. The project would move forward based on the profitability index criterion even though the necessary initial capital investment is not known.

By approving capital investments with a PI of 1.0 or higher, the PI aids investors in selecting which investments to make. All these discounted cash flow methodologies demonstrate that, to properly assess a project in an economically unstable context, all anticipated cash flows must be discounted to account for the hyperinflationary environment. However, Chen (2022) claims that it simply considers the initial investment: The profitability index only considers the project's original investment and ignores any potential current or future investments. Because of this, comparing projects with various investment requirements can be challenging.

# 2.4. How well the DCF-IRR methodology assists management in deciding on capital budgets

According to Tamplin (2023), internal rate of return (IRR) is the rate of return at which the project breaks even, which indicates that for a particular project or investment, the net present value of all cash flows (both positive and negative) will equal zero. The discounted cash flow rate of return (DCFROR) is another name for IRR. In general, IRR is the best tool to employ when examining capital budgeting projects (Fernando, 2023). The time value of money is accounted for in the IRR calculation. IRR is calculated by finding the interest rate at which the necessary capital investment is equal to the present value of a future cash flow. That implies that the IRR computation considers all future cash flows. This makes it possible to assign an equal weight to each cash flow when examining the worth of money over time (Gaille, 2018).

IRR, according to Lanctot (2019), is a simple measurement to calculate. It is straightforward to compare the worth or value of various initiatives that can be taking into consideration at any one time thanks to the information it supplies. When properly estimated,

business leaders may rapidly determine which initiatives would produce the most possible future cash flows. IRR can be used to identify potential cost-savings opportunities with upcoming investments or purchases. However, it disregards the project's total size and scope, according to Khartit (2023). It is crucial to keep in mind that the internal rate of return approach does not consider the size or scope of the project for comparison when comparing projects. Only the cash flows and the quantity of capital used to produce those cash flows will be compared. When utilizing IRR calculations, larger projects typically undervalue smaller projects when two separate projects have extremely differing capital requirements. If this is the only instrument being utilized, a company can end up skipping lengthy projects that could provide significantly greater cash flows over time.

According to Akers (2019), when calculating IRR, future expenditures are disregarded. The internal rate of return method seeks to estimate the future cash flow from a capital infusion. The prospective expenses that could reduce profitability in the future are not taken into consideration. Many expenses for enterprises fluctuate over time, including those for gasoline and maintenance. When assessing the complete scope of the project, the expected cash flows may not be as accurate if certain future costs are ignored.

Other drawbacks of the IRR methodology include the assumption that the IRR will be used as the reinvestment rate for the succeeding projects, the exclusion of dependent projects, the failure to take into account different project terms, the mixing of positive and negative future cashflows, and the exclusion of projects that are mutually exclusive (eFinanceManagement, 2023).

In conclusion, the IRR is a highly helpful tool for helping management decide on capital expenditures, but if utilized outside of the right contexts, it could be misapplied or misread.

#### 3. METHODOLOGY

The study adopted a mixed research approach and questionnaires and interviews were used to collect data. Table 1 shows the population of the study as well as the sample size.

Table 1. Population and Sample

| POSITION                    | POPULATION | SAMPLE |
|-----------------------------|------------|--------|
| Executive                   | 16         | 4      |
| Finance Department Managers | 40         | 10     |
| Accounts Department Clerks  | 80         | 20     |

The sample consisted of 34 participants.

#### 4. RESULTS

### 4.1 Understanding Hyperinflation and how it affects entity's investment choices

Interview Q1: What is a hyperinflationary environment? What do you understand by the term hyperinflation? The question sought to assess if the respondents were well versed with the hyperinflationary environment in which the capital budgeting decisions were being applied to assess their effectiveness. From the research it is evident that all the respondents are well versed with the term hyperinflation and have at one point in time encountered it in their day-to-day activities. Varying definitions where highlighted by the respondents and most of them basically dwelt around the issue of rapid increase in prices of basic commodities. The management's

response indicated that they understood the hyperinflationary environment. Table 2 summarizes the respondents understanding of hyperinflation.

Table 2. Understanding hyperinflation

|       | No of Respondents | Percentage of Respondents |
|-------|-------------------|---------------------------|
| Yes   | 34                | 100%                      |
| No    | 0                 | 0%                        |
| Total | 34                | 100%                      |

All the 34 respondents were aware of and understand the term hyperinflation and the features of a hyper-inflationary economy.

Questionnaire Q2. Is hyper-Inflation a very important factor influencing investment choices?

The aim of the question was to determine how hyperinflation affects NFHL decisions on investments to partake on. Responses from both questions showed that most respondents agreed that hyperinflation has a huge impact on the investment choices of NFHL. As shown in Figure 2 below, 44% of the respondents strongly agreed that hyperinflation affects investment decisions, 32% agreed and 24% were neutral.

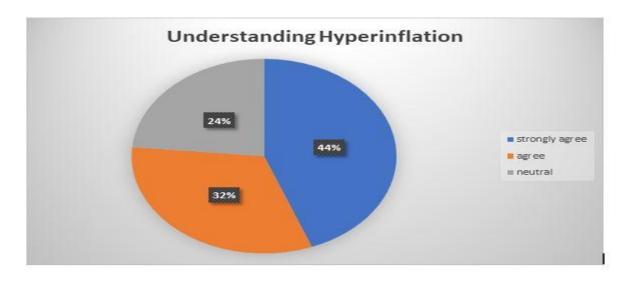


FIGURE 1 UNDERSTANDING HYPERINFLATION

### 4.2 Relationship between hyperinflation and capital budgeting

*Questionnaire Q3: Is there a relationship between capital budgeting and hyperinflation?* 

The above question was asked to assess if those involved in capital decision-making knew how hyperinflation affected investment activities and plans of the entity so that they can incorporate it in investment appraisal. Respondents noted that there is a negative relationship

between hyperinflation and capital budgeting. The researchers noted from the interviews that the respondents highlighted spiraling of prices of inputs resulting in companies charging high prices for their products, the cash flows from production failing to meet the capital budgeting requirements so that projects can be completed in time and abrupt rises in cost of capital making it difficult to plan for future activities. This effect highlighted by respondents also answered the following question:

Questionnaire Q4: Does National Foods Holdings Ltd need to be aware of the impact of inflation on its potential investments' weighted average cost of capital to mitigate risks Most respondents agreed that inflation raises the cost of capital, hence it is important to understand how this rise in cost of capital will affect future investments. Additionally, in answer to the following query, respondents shared their opinions on how hyperinflation may affect certain classes of assets:

### 4.3 Benefits of capital budgeting practices

From conducting this research, the researchers gathered that effective capital budgeting is associated with more advantages than disadvantages and it is seen as a factor positively affecting the financial performance of an entity. However, not all respondents agreed to the benefits of effective capital budgeting implied in the questionnaire. The following diagram (Figure 2) shows the responses given pertaining the five benefits highlighted in questions 6-10 on the questionnaire, among other benefits of capital budgeting.

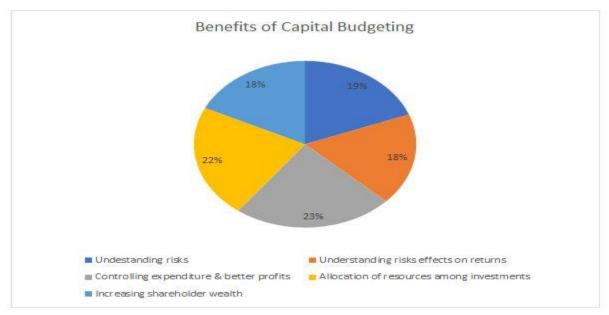


FIGURE 2
BENEFITS OF CAPITAL BUDGETING

**Table 3: Appraisal methods preference** 

| Appraisal Method | Level of Preference |
|------------------|---------------------|
| IRR              | 60%                 |
| NPV              | 30%                 |
| PI               | 10%                 |

By assessing the appraisal methods that were being employed by NFHL, the researchers gathered that the entity preferred using discounted cashflow appraisal methods as they consider time value of money, and the effects of inflation can be incorporated in the discount factor. This preference was seen in the responses to the following questionnaire questions:

## 4.3 Should all investment appraisal techniques consider time value of money as well as inflation in their calculations?

- Q1: Is NPV a capital budgeting technique most suitable in an inflationary environment?
- Q2: The accuracy of results from the NPV technique are dependent on the discount rate used.
- Q3: The P.I technique only considers initial investment and doesn't take time value of money into account.

Figure 4 shows the responses to the above questions which clearly shows that the finance department at NFHL is in favour of discounted cashflow appraisal methods that incorporate inflation in the discount factor such as NPV as both time value of money and inflation are considered.

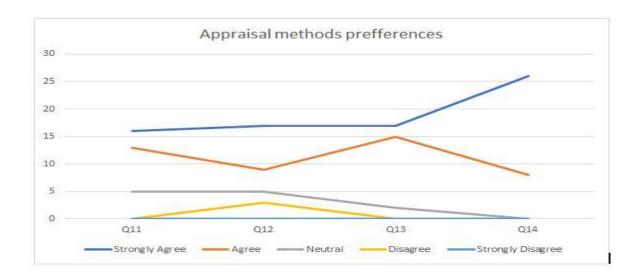


FIGURE 4
APPRAISAL METHODS PREFERENCE

## 4.4 Keeping up to date with the macro-economic environment

Interview 1: Do you attend workshops that deal with capital investment decisions to be equipped with the rightful tools to succeed in a volatile environment?

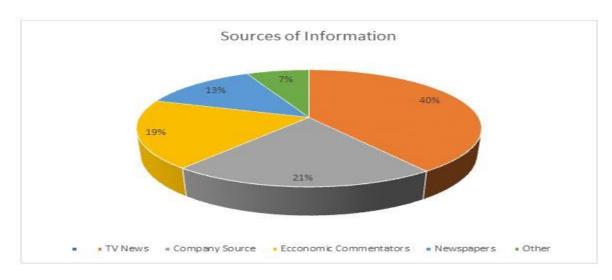
YES NO

The question sought to find out if the entity is making efforts to keep the employees updated on the inflation rates, their changes and future projections. Majority of the respondents revealed that little is being done by the entity to ensure that their employees are kept well up to date with the changes in the macro-economic environment. As shown in Table 3, out of the 34 respondents, 7 gave a "YES" response and 27 gave a "NO" response.

Table 3: Keeping up to date with macro-economic environment

| The state of the s | YES | NO |
|--|-----|----|
| EXECUTIVE  | 1   | 3  |
| DEPARTMENT   | 2   | 8  |
| MANAGERS   |     |    |
| ACCOUNTS CLERKS  | 4   | 16 |

Most employees highlighted that the knowledge at their disposal has been acquired from general sources such as the News, Newspapers and economics commentators addressing the public in general (Figure 5). The pie-chat below highlights the sources of employee knowledge. Of the total respondents, their source of economic information can be shown below.



## FIGURE 5 SOURCES OF INFORMATION

The above pie-chart highlights that the greater of the knowledge at the disposal of employees about inflation is coming from the TV news as compared to the 21% of the company source.

### 4.5 Macro-economic environment and the firm

Q 1: If any, what areas need to be addressed outside the company that may help in making proper capital decision-making?

The above question sought to bring out management's view on the real causes of hyperinflation and to see what can be done on the macro level to reduce the effects of the hyperinflation on capital budgeting.

The analysis shows that out of the 34 interviewed respondents, the majority attributed the causes of hyperinflation to both political and economic factors, but the political factors outweigh the economic ones. The economy was failing due to politically motivated reasons. It therefore came out that the economy was dependent on the stability of the political situation in our country. Politics touched areas like the agricultural sector, manufacturing sector, and the tertiary sector. It was from this that it was derived that the causes of hyperinflation were not independently economic and political, but it was a combination of the two. This analysis can be illustrated as follows:

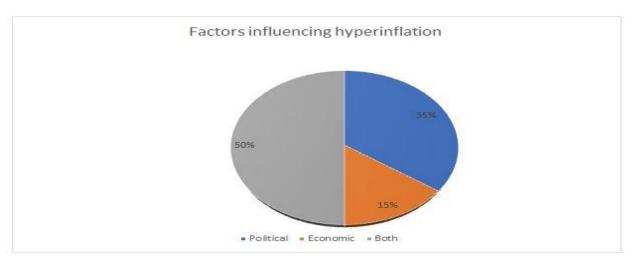


FIGURE 6
FACTORS INFLUENCING HYPERINFLATION

The analysis therefore concluded that the factors that should be corrected outside the firm are political issues that are affecting the country. A stable political environment would necessitate an economically stable environment that would have acceptable inflation rate.

#### 4. 6 Data analysis

Regression Analysis was used to analyze the responses from the questionnaires. The simple linear regression equation [y=b(x)+a] was used to explain the relationship between the linkert scale (dependent variable) and the question responses (independent variable). The results are detailed below in Table 4.

Table 4. Questionnaire Data Analysis (Regression Analysis)
Independent variable -Frequency of responses
Dependent variable-Likert Scale Responses

|                         | i i          |         |           |
|-------------------------|--------------|---------|-----------|
| Questionnaire questions | Co-efficient | P-value | R-Squared |
| Q1                      | -0.49        | 0.008   | 0.93      |

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| Q2  | -0.334 | 0.002 | 0.969 |
|-----|--------|-------|-------|
| Q3  | -0.464 | 0.03  | 0.835 |
| Q4  | -0.833 | 0.058 | 0.75  |
| Q5  | -0.833 | 0.058 | 0.75  |
| Q6  | -0.382 | 0.01  | 917   |
| Q7  | -0.49  | 0.008 | 0.93  |
| Q8  | -0.413 | 0.021 | 0.868 |
| Q9  | -0.444 | 0.028 | 0.843 |
| Q10 | -0.519 | 0.031 | 0.831 |
| Q11 | -0.366 | 0.223 | 0.439 |
| Q12 | -0.285 | 0.051 | 0.769 |
| Q13 | -0.427 | 0.125 | 0.598 |
| Q14 | -0.481 | 0.194 | 0.481 |
| Q15 | -0.248 | 0.127 | 0.595 |
| Q16 | -0.294 | 0.026 | 0.851 |
| Q17 | 0.287  | 0.172 | 0.516 |
| Q18 | -0.374 | 0.07  | 0.936 |
| Q19 | 0.29   | 0.014 | 0.9   |
| Q20 | 0.323  | 0.013 | 0.903 |

Co-efficient-represents the size and direction of the effect that each independent variable has on the dependent variable. A positive co-efficient means as the independent variable increases, the dependent variable also increase. A negative co-efficient means as the independent variable increases, the dependent variable decreases.

P-value-Shows the level of significance of the relationship between the independent and the dependent variable. A P-value of less than 0.05 shows a significant effect of the independent variable on the dependent variable.

R-squared- represents the proportion of variance in the dependent variable that is explained by the independent variable. It ranges from 0-1 and higher values indicate a better fit of the model to the data.

How does hyperinflation affect investment decisions and choices (Q1-Q5)

Majority of respondents agreed that hyperinflation has a negative effect on capital budgeting as shown by the negative co-efficient, P- values less than 0.05(except for Q4 and Q5) and high R-squared values close to 1. A negative relationship between the likert scale and the frequency of responses mean as the scale goes up from 1(strongly agree) to 5 (strongly disagree), number of responses decreases indicating that respondents agreeing were more.

What are the benefits of effective capital budgeting (Q6-Q10)

Majority of responses agreed that effective capital budgeting is advantageous to the entity as shown by the negative co-efficient, P-values less than 0.05 and high R-squared values.

What are the tactics that the business can use to make wise investment decisions in a inflationary environment (Q11-Q14).

#### 5. MAJOR FINDINGS

The research, conducted on National Foods Holdings Ltd, brought about the findings outlined below, the researcher sets out some possible remedies to the improvement of the capital budgeting decision-making process in a hyperinflationary environment.

- 1. There is a general understanding of the hyperinflationary environment within the firm but little understanding of how it affects the organization in terms of capital investment. This holds true for the general industry. Management is trying in its capacity to counter the effects of hyperinflation in investment appraisal though hyperinflation seems to overtake their measures.
- 2. NFHL does not have a solid training foundation in terms of how the economic environment is affecting the organization and how to counter the negative traits, for example, the hyperinflationary environment.
- 3. The research established that considerable number of entities including NFHL are struggling to make capital budgeting decisions due to the uncertainties caused by hyperinflation. It is difficult to forecast the cash flows and the appropriate discount rate to be used in evaluating the projects at hand. NFHL is also struggling to set aside enough resources to complete the projects that would have been planned. The funds are eroded by inflation resulting in some projects taking too long to complete.
- 4. NFHL is facing a situation whereby production is not proportionate with the available assets at hand. Investments in assets are constrained as they cannot make proper forecasts and they cannot procure enough resources to start the projects. It seems that their knowledge base is limited and they cannot appraise their projects properly. Investment appraisal is being taken for granted resulting in some unprofitable projects being undertaken and these deplete the capital base of the entity. On the other hand, profitable projects are abandoned because of poor appraisal in this hyperinflationary environment.

Majority of the respondents agreed to the usefulness of the discounted cashflow appraisal methods such as NPV, PI and IRR in an inflationary environment as shown by negative coefficient, P- values less than 0.05(except for Q12) and high R-squared values close to 1.

How well does the DCF-IRR method assist management in deciding on capital budgets(Q15-Q20). Majority of the respondents agreed that IRR method is advantageous in appraising investments although IRR has some limitations as indicated by Q17, Q19 and 20 where respondents disagreed as shown by the positive co-efficient.

### 6. CONCLUSIONS

The failure by the entity to invest in capital projects in a volatile environment is also because of inadequate technical capacity to plan and make capital decisions. Investment appraisal techniques are still being used when contemplating on project appraisal. Despite the difficulties brought on by a hyperinflation environment, many methodologies, such as Net Present Value, Internal Rate of Return, and Profitability Index, are still applicable. For this reason, management should have an in-depth knowledge of these basic elements in capital budgeting. Such knowledge forms the foundation when investment decisions are being made. It is therefore recommended that entities arrange for workshops that work as regular refresher courses. This helps in keeping management up to date and aid in decision- making. To address the issue of resources set aside not being enough for planned projects due to being eroded by inflation, the researcher recommends that whenever project is planned, there should be a Trust that manages the funds relating to the project. The Trust should manage the funds, sourcing the required funds in time, investing any excess funds so that the negative effects of inflation can be countered. The resources should be kept in a stable currency to be able to procure the resources needed as most of the resources now are imported. It is vital for companies to establish a welldefined feedback system to ensure the effectiveness of capital budgeting system in a hyperinflationary environment.

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