A Theoretical Assessment of the Operational Budgets in Hyperinflation Countries, Lessons from Boarding Schools in Zimbabwe: Effects and Survival Strategies

Lucia Mandongwe[1*], Stanley Murairwa[2], Phamela Dube[3]

[1*]*Manicaland State University of Applied Sciences*
[2]*Africa University*
[3]*Manicaland State University of Applied Sciences*

Abstract: **The research reviewed theoretical and empirical studies on hyperinflation, its effects on boarding school budgets, and adaptation strategies that may be employed by the schools. A critical analysis from prior studies displayed that vehement hyperinflation is a challenge and betrays the purpose of operational budgets in boarding schools. The purpose of operational budgets to play an exceptional role in cost control, planning, organizing, and communication at both national and local levels is rendered useless with hyperinflation. An analysis of the legal framework for education as provided for by the Zimbabwe Education Act and the education policies was also performed so as to have a clear understating of how the financial aspects of boarding schools are executed. The results from the studies reveal that hyperinflation has a great negative impact on the operations of boarding schools. It leads to the destruction of schools' lineament, reduced enrolment, increased arrears, more bad debts, budget deficit, litigation, rising operational cost, and decreased capital investments. The research further discovered that in order to adapt to hyperinflation, boarding schools must be creative and innovative, perform cost reduction and control, adapt to differentiation, online services, cost leadership strategy as well as continuous reviewing of the financial aspects. The research noted that the boarding schools were not spared from the effects of hyperinflation and their only alternative in such disruptive times was to embrace the suggested strategies so as to survive in a hyperinflation environment.**

Keywords**: Hyperinflation, Operational budget, Keynesian theoretical approach, Hyperinflation, Survival strategies**

JEL Classification: H5, H52, H520

I. INTRODUCTION

The exponential growth rate of inflation in Zimbabwe which woes at a month-on-month rate of 321.59 percent on 26 February 2021, though declining, is still a cataclysm (Tradingeconomics, 2021). Notwithstanding the ululations and jubilations that once characterized Zimbabwe in the multi-currency regime (2009-2013), when the economy was stable, it is sad to notice that Zimbabwe has gone back to its melancholy. Zimbabwe was once overshadowed by a perturbing scenario in 2008; when it experienced hyperinflation of 80 billion percent in a single month (McIndoe-Calder, 2018). Indeed, Zimbabwe is failing to entirely rest from this economic monster as it has joined Venezuela and Lebanon which are trending in the world's top two economies with runaway inflation (Nyoni, 2018). This idiosyncrasy of Zimbabwe's inflation has stirred almost every orbit of its economy to the extent that boarding schools are among the segments which struggle the most.

Background of the Research

Zimbabwe's boarding schools have always succumbed to hyperinflation, an economic monster. These segments of learning institutions usually go through a torrid time in trying to implement their operational budgets as prices keep rising and the cost of living correspondingly gets expensive (Gumbe & Kaseke, 2011). From an international perspective, the Sustainable Development Goal (SDG) number 4 (Quality education), is one of the most dominant and confirmed mechanisms to achieve sustainable development (UNDP, 2021). Quality education can be achieved from diverse angles, one of them being associated with a favourable economic environment. It is saddening to note that notwithstanding such a predicament, parents get to the toes of school administrators demanding the usual quality and sufficiency of service delivery for their children, something which is virtually unsurmountable in a hyperinflationary environment. To withstand this, the boarding schools need to adopt strategies that enable them to survive in hyperinflation environment.

Boarding schools in Zimbabwe

The boarding schools in Zimbabwe are guided by the Ministry of Primary and Secondary Education (MOPSE). Even though these boarding schools may be run by the government, churches, councils, or other private organizations, the cabinet of Zimbabwe is the ultimate controller of the schools. The Zimbabwe Education Act *[Chapter 25:04]* outlines the legal framework for the schools which gives guidance on fees to be charged and the role of the school development committee (MOPSE, 2018). Section 13, Part IV of the Zimbabwe Education Act *[Chapter 25:04]* prescribes fees to be charged at Government schools and it notes:

"(1) The Minister shall, in consultation with the Minister responsible for finance, from time to time prescribe the fees which shall be payable for—

(a) Instruction at Government schools; and
(b) Accommodation at Government hostels, and may prescribe different fees for accommodation at different Government hostels*".*

In the same Zimbabwe Education Act *[Chapter 25:04]*, Section 21, Part V sets the conditions for fees relating to non-government schools, and their transcripts:

"(1) No responsible authority shall—
(a) Charge any fee or levy; or
(b) Increase any fee or levy by more than the prescribed amount or percentage in any period of twelve months; in respect of any pupil attending a non-Government school, unless the fee or levy or increase therein, as the case may be, has been approved by the Secretary.

(2) Any responsible authority who wishes to obtain approval for any fee or levy or increase therein in terms of subsection (1) shall make an application to the Secretary in writing, setting out the full details of the proposed fee or increase therein, and the basis of calculation thereof."

The above sections extracted from the Education Act of Zimbabwe *[Chapter 25:04]*, clearly outline that schools in Zimbabwe do not unnecessarily increase their fees without following the actual procedure as indicated in the Act. What is important to note is the fact that it is a chargeable offense to unnecessarily increase school fees without following the prescribed procedure.

However, the past experience has indicated that in an unsound economy, the government does not usually respond positively to the school fees increase request. This is done as a way of trying to avoid overburdening parents. In most cases, if the government approves the school fees increase, it will just be an insignificant increase. This is evidenced by a statement from the Acting Minister of Primary and Secondary Education, who said "the government is on record saying schools should not increase fees by more than 20 percent without government approval" (Zimbabwe Broadcasting Corporation , 2021). The Sunday mail of 24 November 2019 disclosed that "the Ministry of Primary and Secondary Education has ordered that all school fees increases by private schools for next year are null and void….." (Sundaynews, 2021). Such a response may have a detrimental effect on the running of the schools in a hyperinflationary environment because the budgeted income would have lost its purchasing power and at the same time, budgeted expenses would have skyrocketed.

Zimbabwe Schools per Province

Zimbabwe's schools in total according to the 2018 survey are listed in Table 1.

Table 1: Number of Schools per Province in Zimbabwe

Province	Primary				Secondary			
	Boarding School	Day and Boarding School	Day School	Total	Boarding School	Day and Boarding School	Day School	Total
Bulawayo	2	6	219	227	0	12	75	87
Harare	2	10	271	283	5	21	223	249
Manicaland	3	21	856	880	7	34	393	434
Mashonaland Central	3	4	517	524	6	12	234	252
Mashonaland East	2	17	735	754	11	27	338	376
Mashonaland West	3	13	743	759	6	18	359	383
Masvingo	5	10	861	876	4	22	332	358
Matabeleland North	0	0	618	618	4	12	184	200
Matabeleland South	2	8	511	521	7	22	134	163
Midlands	2	17	825	846	4	28	337	369
Grand Total	24	108	6156	6288	54	208	2609	2871

Table 1 shows the distribution of all schools including boarding schools in Zimbabwe per province. The table shows that 2.10% of the primary schools are boarding schools while 9.13% of the secondary schools are boarding schools. Thus, 4.30% of all schools in Zimbabwe are boarding schools. According to (UNICEF, 2021), the education budgets were difficult to implement successfully due to a harsh economic environment that was being experienced in the past years and this led to a budget deficit. The employment cost rose whilst the operations and investment costs had negative deviations from budget allocation as shown in Figure 1.

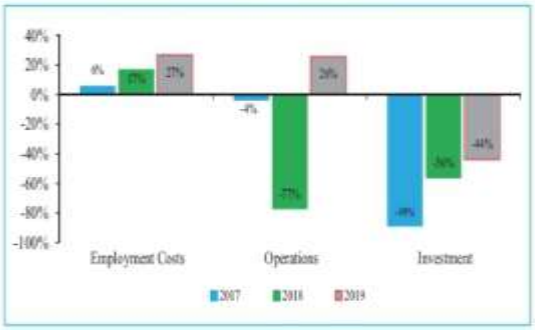

Figure 1: Zimbabwe Education budget credibility by economic classification, 2017 – 2019 (Source: UNICEF, Zimbabwe Education Sector Budget Brief, 2020)

The schools have been affected by the same effects that cascaded from the national platform. The budget has also not been easy to adhere to due to the effects of hyperinflation. This is supported by the results that are presented in Figure 2.

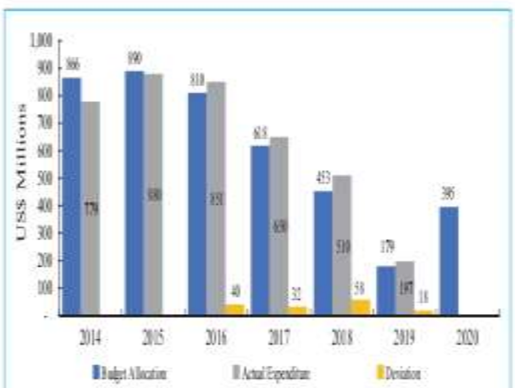

Figure 2: Zimbabwe Education budget allocation and actual expenditure, 2014 – 19 (Source: UNICEF, Zimbabwe Education Sector Budget Brief, 2020)

In addition, from a national perspective, there was also a consecutive budget deficit for the country for the past 10 years as indicated in Figure 3.

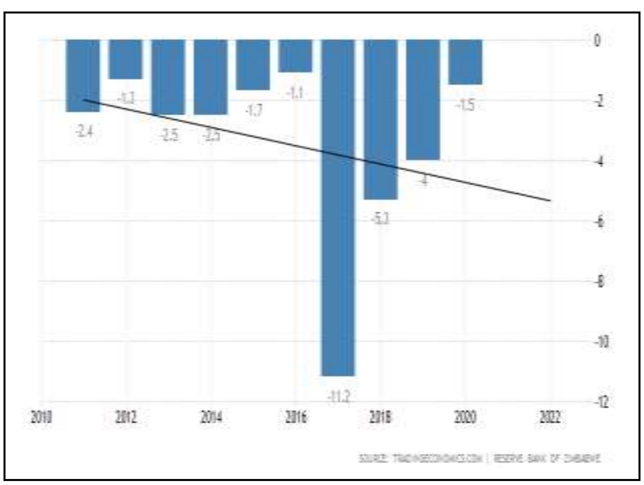

Figure 3: Zimbabwe Government Budget deficit 2010-2020 (Tradingeconomics, 2021)

Statement of the Problem

While the adverse effects of Zimbabwe's rampaging inflation have compelled many prior researchers to attempt to proffer lasting solutions to the economy at large (Charles & Marie, 2020; Reilly, 2020; Miller, 2019; Kulesza, 2017; Bittencourt, 2012; Coomer & Gstraunthaler, 2011; Kamin & Ericsson, 2003; Wang, 1999; Cavallo & Mondino, 1995; Gurgenidze, Lobzhanidze, & Onoprishvili, 1994), there is insignificant available research on hyperinflation in the education sector. The available literature indicates that little attention has been focused on the specific economic sectors which may require customised strategies in order to survive in a hyperinflation environment. The implication of this is that there is a dearth of literature on hyperinflation and its effects on specific economic sectors like the education sector. Studies on how the education sector especially the boarding schools, can combat hyperinflation needs a closer look because leaving such a segment unattended is doing injustice to SDG number four. SDG goal number four is about quality education and it intends to ensure inclusive and equitable quality education as well as to promote lifelong learning opportunities for all. The boarding schools are generally positioned in an uncompromising situation during hyperinflation because they are controlled by government policies and they follow a lot of bureaucratic processes (MOPSE, 2018). In times of rampaging inflation, covering operating expenses, performing capital projects, or even increasing employees' salaries will be a hard nut to crack for boarding schools given the scanty income which will be available. A boarding school is a microcosm of the macrocosm.

Research Objectives

The main objective of the research is to identify a theoretical relationship between hyperinflation and the operational budget of boarding schools in Zimbabwe. The specific objectives were to assess the causes of hyperinflation; evaluate the effects of hyperinflation on operational budgets of boarding schools, and assess the survival strategies being adopted by boarding schools in Zimbabwe in times of hyperinflationary.

II. LITERATURE REVIEW

Theoretical Framework

The research is supported by the demand-pull, Keynes theory, and the structural theories of inflation. It is important to note that Zimbabwe's hyperinflation is very complex, therefore, making it difficult to characterize (Coomer & Gstraunthaler, 2011; Hanke, 2008; Clemens & Moss, 2005). The trend it follows has left a lot of economists puzzled. From a certain angle, it appears like it is demand-pull inflation whereas from a different angle it seems like structural inflation. Generally, one may believe it is a hybrid of both (Besada & Moyo, 2008; Gumbe & Kaseke, 2011; Hanke & Kwok, 2009; Makochekanwa, 2007).

Demand-pull theoretical approach: From the Monetarists' position as advocated by Friedman (1912-2006), inflation is completely a pecuniary phenomenon. Monetarists argue that a huge influx of money supply will yield inflation (Besada & Moyo, 2008; Pindiriri, 2012; Totonchi, 2011; Holzschuh, et al., 2020; Batsinda & Shukla, 2019; Friedman, 1968). When money supply surpasses money demand, cash balances at the disposal of the public will be high. The public will then demand a lot of goods and services. In this circumstance, the non-existence of a commensurate augmentation in production, will glut demand and impel prices in an upwards direction (Besada & Moyo, 2008; Batsinda & Shukla, 2019). When this transpires, the economy will start to shake, and the effects will be adverse.

Keynesian theoretical approach: The other perspective is promulgated by Keynes (Bronfenbrenner & Holzman, 1963; Weintraub, 1978; Trevithick, 1975; Perry & Cline, 2016; Kim, 2020; Seguino, 2019). From the Keynesian perspective, inflation is a fiscally induced monetary manifestation. It originates when total demand is more than total supply at 100% of output (Totonchi, 2011; Palley, 2019). The national budget shortfall greatly determines inflation in this instance. The larger the spread between total demand and total supply, the speedy the inflation.

Structural theoretical approach: This model of inflation is usually associated with lowly developed countries. It springs up from the structural inadequacies in the economy or the government's monetary policy (Funke, Hall, & Sola, 1994; Kulesza, 2017; Makochekanwa, 2007; Charles & Marie, 2020; Kamin & Ericsson, 2003). The government will create a monetary policy that greatly instigates structural inflation rather than the demand and supply factors. A peculiar characteristic of this inflation is an inordinate liberal monetary policy for example the central bank may inject lashings of money into the economy or there may be very low rates of interest for an extended duration (Edmond, 2007; Fischer, Ratna, & Carlos, 2002; Kim, 2020). The consequence of this position is a fall in the value of the functional currency due to growing demand.

The Anatomy of Hyperinflation

Inflation is loosely understood as the rise in the standard of living gauged using the consumer price index (Siklos, 2000). On the other hand, hyperinflation literature is sprinkled with different definitions. Hyperinflation refers to acme inflation and is usually associated with a considerable shrink in economic activities as well as poverty (Miller, 2019). This phenomenon is believed to have generally emanated after the Second World War up to 1996 and is described as a rare and modern occurrence (International Monetary Fund (IMF), 2018). Hyperinflation can also be understood from Cagan's perspective as a result of the government's initiative to print money so as to fund a fiscal gap (Cagan, 1956; Edmond, 2007; Cerda, Silva, & Lüders, 2020). According to Cagan's model, hyperinflation can be dissected from two angles, bringing out two equations. One model has an equation that focuses on the people's demand for money whilst the other model's angle is on the development of inflation expectations over time.

Hyperinflation is a monthly inflation rise of more than 50% (Cagan, 1956; Rogers & Wang, 1993). However, (Fischer, Ratna, & Carlos, 2002) as well as Capie (1986) argue that an annual inflation of 100% or higher denotes hyperinflation. Cagan (1956) did not give duration to his hyperinflation but Fischer, Ratna, and Carlos' (2002) hyperinflation will last for an extended duration, usually a minimum of 12 months. The IMF (2018) mentions that there are a lot of repercussions concomitant with the exploration of hyperinflation due to its eccentric characteristics. Black or parallel markets are a habitual site in a hyperinflationary economy due to an incessant downward force on the buying power of the local currency. This will have the effect of compelling people to shun their domestic legal tender and to quickly transmute this local currency into assets or another currency of a higher value like the United States Dollar, Pound, or any other foreign currency (Alvarez, Beraja, Gonzalez-Rozada, & Neumeyer, 2019). The IMF (2018), further states that Africa has been the worst affected continent in the whole world by hyperinflation. In Africa, the Democratic Republic of Congo took the longest hyperinflationary cycle of 31 years followed by Latin America and Argentina which took 25 years in the cycle. Zimbabwe data for the past twelve months (March 2020- February 2021) shows Zimbabwe dwindling with runaway inflation, exceeding 100% as shown in Figure 4.

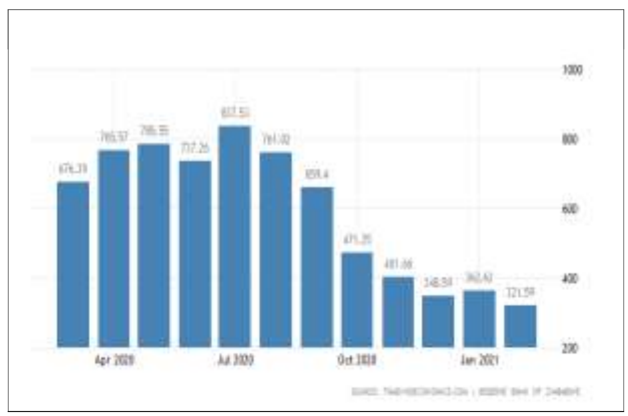

Figure 4: Zimbabwe's run-away inflation (Tradingeconomics, 2021)

Preparation and Implementation Process of Operational Budgets in Zimbabwe's Boarding Schools

In Zimbabwe, schools are mandated to prepare annual operating budgets in advance of the implementation period. Schools are supposed to set up their budgets before the beginning of every financial year. These operational budgets will consist of forecast revenue as well as forecast operational expenses to be incurred by the school in the impending year. Capital expenditure is also budgeted for. This budgetary preparation process follows a bottom-up approach whereby the respective departments in the school prepare their departmental budgets which are consolidated and incorporated into a master operational budget (veritaszim, Education Regulations, 2021). However, a challenge in the implementation process is always encountered especially when the economy is hostile. The government policy in most cases recommends strict adherence to the budget so that actual operation conforms to the budget (veritaszim, Mopse, SDC handbook, 2021) The purpose of the budget is for strategic planning and coordination of the different departments as well as cost control.

III. RESEARCH METHODOLOGY

The study used secondary data that was collected from the literature. The study sought to review related literature on the effect of hyperinflation on the operational budget of boarding schools in Zimbabwe and evaluate the possible survival strategies that the boarding schools may employ in order to survive the hyperinflation. Related empirical and theoretical literature was reviewed. A comprehensive analysis was performed and data was collected from the previous studies. It was then presented in the form of tables. A total of eight causes of inflation were used to analyse the previous relevant studies. From available literature, the research identified thirty-eight studies that were analysed for this research.

IV. DATA AND RESULTS

Causes of hyperinflation

The causes of hyperinflation that were examined are Exchange rate (ER), Increase Price Expectations (IPE), Interest rate (IR), Low Output Growth (LOG), Poor Monetary Policy (PMP), National Budget Deficit (NBD), Variables Cointegration (VC) and Political Rights (PR).

Table 2: Summaries of the factors that causes inflation

Author	Period	Factors							
		ER	**IPE**	**IR**	**LOG**	**PMP**	**NBD**	**PR**	**VC**
Data Period									
(Pindiriri & Nhavira, 2011)	1975 – 2008								
(Maune, Matanda, & Mundonde, 2020)	1980 – 2019								
(Mukochekanwa, The impact of a budget deficit on Inflation in Zimbabwe, 2008)	1980 – 2005								
(Nyoni, 2018)	2009 – 2018								
(Pindiriri, 2012)	2009 – 2011								
(Madesha, Chidoko, & Zivanomoyo, 2013)	1980 – 2007								
(Mukochekanwa, 2007)	1999 – 2006								
(Makena, 2020)	2010 – 2015								
(Coomer & Gstraunthaler, 2011)	1997 – 2000								
Charles & Marie, (2020)	-								

Table 2 shows the studies that investigated the selected causes of hyperinflation and the results obtained. The table also shows the range of the data that was used in each of the research reviewed. The research by Pindiriri and Nhavira (2011) identified all the factors as the causes of hyperinflation except the political rights (PR) using the data from 1975 to 2008. Further analysis of Table 2 is presented in Table 3.

Table 3: Causes of Inflation

Factor	Frequency	Percentage	Rank
Poor Monetary Policy (PMP)	9	26.47	1
Exchange Rate (ER)	6	17.65	2
Interest Rate (IR)	5	14.71	3
National Budget Deficit (NBD)	4	11.76	4
Low Output Growth (LOG)	3	8.82	5
Increase Price Expectations (IPE)	3	8.82	6
Political Rights (PR)	2	5.88	7
Variables Cointegration (VC)	2	5.88	8
Total	34	100.00	

The literature reviewed that is presented in Table 3 reveals that hyperinflation occurs due to the printing of money in response to high country debt, declining economic output and export earnings, price controls that exacerbate shortages, lack of confidence in government, economy, and political life and expectations of hyperinflation. A summary of the findings is presented in Figure 5.

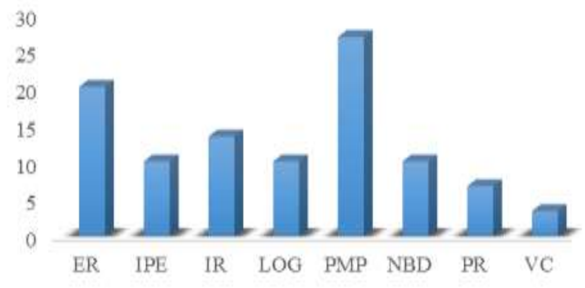

Figure 5: Causes of inflation

Figure 5 shows that cointegration is not a major factor that causes inflation. About 96.7% of the reviewed literature rejected the factor as causing inflation except for 3.3% of the researchers. The major causes of inflation are poor monetary policy (26.67%) and exchange rate (20%). The results agree with the findings by Amadeo (2020) who found that hyperinflation was caused by money supply and pull demand. The budget deficit affects the operations of government schools, especially boarding schools. Generally, most economists argue that an increase in money supply has always been the chief causal factor of escalations in prices as opposed to vicissitudes in price-setting behavior. An inflationary economy is associated with an uncontrolled printing of money to cover the deficit in government expenditure. This printing is usually done without a corresponding increase in the production of goods and services (Hanke & Kwok, 2009; Gumbe & Kaseke, 2011; Clemens & Moss, 2005).

The central bank is blamed solely for a monetary system that has caused havoc in the economy and consequently hyperinflation (Hanke & Kwok, 2009; Rogers & Wang, 1993; Besada & Moyo, 2008; Clemens & Moss, 2005; Coomer & Gstraunthaler, 2011; Gumbe & Kaseke, 2011; Makochekanwa, 2007; McIndoe-Calder, 2018). The researchers also found that the existence of a parallel market exchange rate played an enormous role in fuelling hyperinflation. Expensive imports whose premium will have an indirect bearing on inflation are the major source. Another disturbing note concerns the structural changes especially the partisan politics which has become trendy in the current regime. There is feeble governance and political uncertainty in the economy leading to a shortage of electricity, water, raw materials and demoralized labour force. The consequence is an unsatisfactory output level of production. (Josephson & Shively, 2021)

Additionally, the mobile money companies were accused of money laundering by generating fictitious mobile money and purchasing foreign currency which was then transferred to foreign countries. Some of this fictitious money would pass through the banking platform hence distorting the normal flow of banking transactions (Zikhali, 2020). This behaviour by mobile money operators was described by the country's central bank as amounting to a Ponzi scheme which would, in turn, lead to hyperinflation. The result was an operating environment that was challenging for the general public and organizations to survive (QuartzAfrica, 2021). The boarding schools cannot sustain in this operating environment.

The Effects of Hyperinflation on Boarding Schools in Zimbabwe

The researchers identified the effects of hyperinflation on boarding schools in Zimbabwe and these include Destruction of Schools' lineament (DSL), Reduced Enrolment (RE), Increased Arrears (IA), More Bad Debts (MBD), Budget Deficit (BD), Litigation (L), Rising Operational Cost (ROC) and Decreased Capital Investments (DCI). These effects are displayed in Table 4.

Table 4: Effects of Hyperinflation

Author	DSL	RE	IA	MBD	BD	L	ROC	DCI
Hanke & Kwok, 2009			✓	✓	✓	✓	✓	✓
Batsinda & Shukla, 2019	✓		✓	✓	✓	✓		
Charles & Marie, 2020	✓		✓		✓			
Besada & Moyo, 2008								
Cagan, 1956	✓		✓		✓		✓	
Cerda, Silva, & Lüders, 2020		✓	✓				✓	✓
Frenkel, 1977							✓	✓
Fischer, Ratna, & Carlos, 2002	✓	✓	✓	✓	✓	✓	✓	✓
Coomer & Gstraunthaler, 2011			✓	✓	✓		✓	✓
Gumbe & Kaseke, 2011		✓	✓		✓		✓	✓
Batsinda & Shukla, 2019				✓			✓	✓
Moyo & Crafford, 2010		✓				✓		✓
Cerda, Silva, & Lüders, 2020				✓			✓	
Miller, 2019	✓							
Hanke, 2008					✓		✓	✓
Alvarez, Beraja, Gonzalez-Rozada, & Neumeyer, 2019							✓	✓
Capie, 1986							✓	✓
Holzschuh, et al., 2020				✓			✓	✓

Table 4 indicates that boarding schools have not been spared in bearing the brunt of hyperinflation that was experienced by the country. Implementing the operational budget was difficult as the prices keep on rising and the cost of living was correspondingly expensive. The summarising description of hyperinflation is that it destroys the economy and subsequently, the boarding schools' lineament (Hanke & Kwok, 2009; Batsinda & Shukla, 2019; Charles & Marie, 2020; Besada & Moyo, 2008; Cagan, 1956; Cerda, Silva, & Lüders, 2020; Frenkel, 1977). Some parents and guardians who have children in boarding schools will be left with no option but to withdraw them, leaving arrears in most cases.

What this implies is that the school's budget deficit will continue to widen and fixed costs will be difficult to pay. Some suppliers of goods and services will reach the extent of suing the schools (Fischer, Ratna, & Carlos, 2002; Coomer & Gstraunthaler, 2011; Gumbe & Kaseke, 2011; Kwakye, Welbeck, Owusu, & Anokye, 2018; Moyo & Crafford, 2010). More so, some boarding schools' 'fees first' policy will mean the money will lose its purchasing power in the bank due to hyperinflation. When things get tough, some boarding schools will be forced to make high-interest overdrafts so as to cover a shortfall in operating expenses. Savings for future use will simply be a non-event for the schools.

Sometimes even if the government approves fees upward adjustment, the parents who will be faced with the same predicament as the school and will find it difficult to owner up the fees top up because they too will be suffering (Cerda, Silva, & Lüders, 2020; Besada & Moyo, 2008; Miller, 2019; Hanke, 2008; Capie, 1986; Cresswell & Plano Clark, 2011). The students' dining hall, will be affected by hyperinflation. Food for students will lose its quality and quantity. In most circumstances, when a school has overdue debts, payment may be a challenge as its working capital will be dwindling. This may force some suppliers to attach the school's assets as compensation for the unsettled debts.

Survival Strategies of Boarding Schools in Hyperinflationary Environment.

Several hyperinflation busting techniques were identified by the researchers in order to ensure that boarding schools adapt to hyperinflation and continue to survive in the tough economic times. The strategies identified include Cost Reduction (CR), Innovation (I), Differentiation (D), Online Services (OS), Cost Leadership Strategy (CLS), and Continuous Financial Review (CFR). These survival strategies are presented in Table 5.

Table 5: Survival strategies of Boarding Schools in Zimbabwe

Author	CR	I	D	OS	CLS	CFR
Arthur, Strickland, & Janes, (2017)	■	■			■	
Kotler, Keller, & Lu, (2009)		■	■			
Kotler, Jain, Jain, & Maesincee, (2002)		■				
Gumbe and Kaseke, (2011)	■	■	■	■		
Swanson, (2007)	■	■		■	■	
Hanke & Bostrom, (2017)	■					■
Hwang, Shan, Zhu, & Lim, (2020)	■	■				■
Arabiyat & Al-Momani, (2020)	■				■	■
Sarkar & Giri, (2020)	■		■			■
Skiba, Saini, & Friend, (2019)	■	■				■

From Table 5, it can be noted that the time is ripe for boarding schools to wake up from the cocoon or rise from the deep slumber when hyperinflation occurs. Adopting inflation-dampening activities should be the way to go when the economy is tough. Cost reduction and innovation should take center stage. Being productive using niche strategies will be the only option. The schools can utilize geographical advantages and uniqueness by pursuing projects which accomplish cost reduction whilst yielding high returns (Arthur, Strickland, & Janes, 2017; Mandongwe & Jaravaza, 2020). Schools in high rainfall environments, for example, can embark on agricultural activities so that they get food for the school and sell the excess, then use the profits to cover other running costs. On the other hand, those in mining areas can have shops so as to offer readily available goods to the miners. This is referred to as a focus strategy (Kotler, Keller, & Lu, 2009). Therefore, there is need for a money loading and levelling in response to the changes in inflation.

To combat competition, the schools should offer profit-generating products and services in a unique way (Kotler, Jain, Jain, & Maesincee, 2002). This according to Gumbe and Kaseke (2011), is referred to as differentiation and is an excellent way to attract customers when the competition is stiff. Driving down costs should also be the principal point in a hyperinflationary environment. Just like in a business, the boarding school should try by all means to reduce its costs through the use of a cost leadership strategy (Arthur, Strickland, & Janes, 2017). Using this approach, the school will be ensuring that there is a limited school dropout rate by not raising its school fees. They should therefore try to cover the rising costs through purchasing cheaper goods. More so, unnecessary, non-essential costs must be avoided. There must be a change in the purchasing and spending behavior of boarding schools. Online services may be alternatively used instead of manual. This will reduce fuel as well as travel and subsistence expenses. A collective effort of everyone at the school must be engaged to minimise electricity and water charges by using such services sparingly.

In addition, after reaching a consensus with the students, every luxurious diet may be replaced with cheaper options or maintained with a reduced quantity. On the other hand, extraordinary activities like parties and trips for leisure purposes may also be reduced or eliminated to divert funds to essential cost centers. Capital expenditure projects like construction may also be put on halt or only embarked on if the available funds will allow a smooth flow of the day-to-day expenses. As part of school fees payment, students may be asked to bring in groceries and toiletries. This can go a long way in assisting the school in its operations. The workers employed by the school may in turn be compensated with some of these items as part of their remuneration in addition to the salaries and wages they will be getting. Holding on to physical goods is an excellent way of maintaining value. It is also very wise for the boarding schools to minimise the effects of hyperinflation by continuously holding finance meetings so as to check on the financial progress, especially on cost control and cost reduction (Hwang, Shan, Zhu, & Lim, 2020; Arabiyat & Al-Momani, 2020; Sarkar & Giri, 2020; Skiba, Saini, & Friend, 2019; Hanke, 2008; Swanson, 2007). Cost control and cost reduction mechanisms should be effectively applied and corrective action has to be implemented especially when the costs are escalating.

V. CONCLUSION AND RECOMMENDATIONS

The research found that boarding schools are a microcosm of the macrocosm. They are affected by hyperinflation in as much as the country is affected. Hence they are supposed to develop survival strategies when there is inflation. Some of the strategies that boarding schools could implement are cost reduction, innovation, differentiation, online services, cost leadership strategy, and continuous financial review. Thus, all boarding schools in Zimbabwe in particular and the world at large should embrace the findings of this research so that they survive during the DVUCA economic environment.

REFERENCES

[1] UNDP. (2021, February 26). Sustainable Development Goals-Goal 4: Quality Education. Retrieved from UNDP Zimbabwe: https://www.zw.undp.org

[2] Alvarez, F., Beraja, M., Gonzalez-Rozada, M., & Neumeyer, P. A. (2019). From Hyperinflation to Stable prices: Argentina's Evidence on Menu Cost Models. The Quarterly Journal of Economics, 134(1), 451-505.

[3] Amadeo, K. (2020, July 1). Hyperinflation: Its Causes and Effects With Examples. Could You Survive Hyperinflation?

[4] Arabiyat, S. M., & Al-Momani, A. H. (2020). Management and Cost Control of Construction Projects in Jordan. International Business Research, 13(9), 166-176.

[5] Arthur, A., Strickland, A. J., & Janes, A. (2017). Crafting and Executing Strategy: The Quest for Competitive Advantage: Concepts and Cases. McGraw-Hill Education.

[6] Batsinda, G., & Shukla, J. (2019). Inflation and Profitability of Commercial Banks in Rwanda: A Case Study of Bank of Kigali. International Journal of Business and Management; Vol. 14, No. 10; 2019, 14(10), 35-43.

[7] Besada, H., & Moyo, N. (2008). Zimbabwe in Crisis: Mugabe's Policies and Failures. The Centre for International Governance Innovation.

[8] Bittencourt, M. (2012). Democracy, Populism and Hyperinflation: Some Evidence from Latin America. Economics of Governance, 13(4), 311-332.

[9] Bronfenbrenner, M., & Holzman, F. D. (1963). Survey of Inflation Theory. The American economic review, 53(4), 593-661.

[10] Cagan, P. (1956). The Monetary Dynamics of Hyperinflation. In M. Friedman (Ed.), Studies in the Quantity Theory of Money (pp. 25-117). Chicago: University of Chicago Press.

[11] Capie, F. (1986). Conditions in Which Very Rapid Inflation has Appeared. Carnegie-Rochester Conference Series on Public Policy, 24, 115–168.

[12] Cavallo, D. F., & Mondino, G. (1995). Argentina's Miracle: From Hyperinflation to Sustained Growth. World Bank.

[13] Cerda, R., Silva, A., & Lüders, R. (2020). Price Controls, Hyperinflation and the Inflation–relative Price Variability Relationship. Empirical Economics, 1-24.

[14] Charles, S., & Marie, J. (2020). A Note on the Competing Causes of High Inflation in Bulgaria during the 1990s: Money Supply or Exchange Rate? Review of Political Economy, 32(3), 433-443.

[15] Clemens, M., & Moss, T. (2005). Costs and Causes of Zimbabwe's Crisis. Washington, DC, USA.: Center for Global Development.

[16] Coomer, J., & Gstraunthaler, T. (2011). The Hyperinflation in Zimbabwe. The Quarterly Journal of Austrian Economics, 3, 311 - 346. Retrieved from http://mises-media.s3.amazonaws.com/qjae14_3_3.pdf

[17] Coomer, J., & Gstraunthaler, T. (2011). The Hyperinflation In Zimbabwe. Quarterly Journal of Austrian Economics, 14(3), 311-346.

[18] Cresswell, J., & Plano Clark, V. (2011). Designing and Conducting Mixed Method Research. 2nd Sage. Thousand Oaks, CA.

[19] Edmond, C. (2007, April 4). Cagan's Model of Hyperinflation. The Global Economy, pp. 1-3.

[20] Fischer, S., Ratna, S., & Carlos, V. (2002). Modem Hyper-and High Inflations. Journal of Economic Literature, 40, 837-880.

[21] Frenkel, J. A. (1977). The Forward Exchange Rate, Expectations and the Demand for Money: The German Hyperinflation. The American Economic Review, 67(4), 653-670.

[22] Friedman, M. (1968). The Role of Monetary Policy. The American Economic Review, 58(1), 1-17.

[23] Funke, M., Hall, S., & Sola, M. (1994). Rational Bubbles During Poland's Hyperinflation: Implications and Empirical Evidence. . European Economic Review, 38(6), 1257-1276.

[24] Gumbe, S., & Kaseke, N. (2011). Manufacturing Firms and Hyperinflation- Survival Options: the Case of Zimbabwe Manufacturers (2005-2008). Journal of Management and Marketing Research, 1-22.

[25] Gurgenidze, L., Lobzhanidze, M., & Onoprishvili, D. (1994). Georgia: From Planning to Hyperinflation. Communist Economies and Economic Transformation, 6(3), 259-289.

[26] Hanke, S. (2008). New Hyperinflation Index (HHIZ) Puts Zimbabwe Inflation at 89.7 Sextillion Percent. Retrieved from Cato Institute: http://www. cato. org/zimbabwe

[27] Hanke, S. (2008). Zimbabwe: From Hyperinflation to Growth. New Zanj Publishing.

[28] Hanke, S., & Bostrom, E. (2017). Zimbabwe Hyperinflates, Again: The 58th Episode of Hyperinflation in History (No. 90). Institute for Applied Economics, Global Health, and the Study of Business Enterprise.

[29] Hanke, S., & Kwok, A. (2009). On the Measurement of Zimbabwe's Hyperinflation. Cato Journal, 29(2), 353-364.

[30] Holzschuh, P., Mishra, A., Misra, J., IMoosa, I. A., Nath, S., & awadros, G. B. (2020). An Augmented P-star Model of Indian Inflation. Applied Economics, 52:26,(26), 2795-2806.

[31] Hwang, B. G., Shan, M., Zhu, L., & Lim, W. C. (2020). Cost Control in Megaprojects: Efficacy, Tools and Techniques, Key Knowledge Areas and Project Comparisons. International Journal of Construction Management, 20(5), 437-449.

[32] International Monetary Fund (IMF). (2018). The Modern Hyperinflation Cycle: Some New Empirical Regularities. Western Hemisphere Department.

[33] Josephson, A., & Shively, G. E. (2021). Unanticipated events, Perceptions, and Household Labor Allocation in Zimbabwe. World Development, 141.

[34] Kamin, S. B., & Ericsson, N. R. (2003). Dollarization in Post-Hyperinflationary Argentina. Journal of International Money and Finance, 22(2), 185-211.

[35] Kim, H. (2020). A Missing Element in the Empirical Post Keynesian Theory of Inflation—Total Credits to Households: A First-Differenced VAR Approach to US Inflation. Journal of Post Keynesian Economics, 43(4), 640-656.

[36] Kotler, P., Jain, D. C., Jain, D., & Maesincee, S. (2002). Marketing Moves: A New Approach to Profits, Growth and Renewal. Harvard Business Press.

[37] Kotler, P., Keller, K. L., & Lu, T. (2009). Marketing Management in China. Prentice Hall.

[38] Kulesza, M. (2017). Inflation and Hyperinflation in Venezuela (1970s-2016): A Post-Keynesian Interpretation. Berlin: Institute for International Political Economy .

[39] Kwakye, T., Welbeck, E., Owusu, G., & Anokye, F. (2018). Determinants of Intention to Engage in Sustainability Accounting and Reporting (SAR): The Perspective of Professional Accountants. International Journal of Corporate Social Responsibility, 3(1), 195-209.

[40] Madesha, W., Chidoko, C., & Zivanomoyo, J. (2013). Empirical Test of the Relationship Between Exchange Rate and Inflation in

Zimbabwe. Journal of Economics and Sustainable Development, 4(1), 52 - 59.
[41] Makena, P. (2020, June 18). Determinants of Inflation in a Dollarized Economy: The Case of Zimbabwe. Nairobi: African Economic Research Consortium. Retrieved from AfricanPortal: https://media.africaportal.org/documents/Research-paper-386.pdf
[42] Makochekanwa, A. (2007). A Dynamic Enquiry into the Causes of Hyperinflation in Zimbabwe.
[43] Mandongwe, L., & Jaravaza, D. C. (2020). Women Entrepreneurial Intentions in Subsistence Marketplaces: The Role of Entrepreneurial Orientation and Demographic Profiles in Zimbabwe. Cogent Business & Management, 7(1), 1-36.
[44] Maune, A., Matanda, E., & Mundonde, J. (2020). Is Money Supply the Cause of Inflation in Zimbabwe? An Empirical Examination. AUDOE, 16(3), 17 - 37.
[45] McIndoe-Calder, T. (2018). Hyperinflation in Zimbabwe: Money Demand, Seigniorage and aid shocks. Applied Economics, 50(15), 1659-1675.
[46] Miller, S. M. (2019). Hyperinflation and Seignorage in Venezuela. Mercatus Center: George Mason University.
[47] MOPSE. (2018). Annual Education Statistics Report. Harare, Zimbabwe: Ministry of Primary and Secondary Education.
[48] Moyo, A., & Crafford, G. (2010). The impact of hyperinflation on the Zimbabwean construction industry. Acta Structilia. Journal for the Physical and Development Sciences, 17(2), 53-83.
[49] Mukochekanwa, A. (2007). A Dynamic Enquiry into the Causes of Hyperinflation in Zimbabwe. University of Pretoria, Department of Economics, Pretoria.
[50] Mukochekanwa, A. (2008). The impact of a budget deficit on Inflation in Zimbabwe. University of Pretoria. Pretoria: Munich Personal RePEc Archive (MPRA). Retrieved from http://41.175.146.201/bitstream/handle/10646/2963/Makochekanwa_impact_of_%20budget_%20deficit_%20on_%20inflation_%20in_%20Zimbabwe.pdf?sequence=1&isAllowed=y
[51] Nyoni, T. (2018). Modeling and Forecasting Inflation in Zimbabwe: a Generalized Autoregressive Conditionally Heteroskedastic (GARCH) approach. University of Zimbabwe, Department of Economics. Harare: Munich Personal RePEc Archive (MPRA). Retrieved from https://mpra.ub.uni-muenchen.de/id/eprint/88132
[52] Palley, T. (2019). Macroeconomics vs. Modern Money Theory: Some Unpleasant Keynesian Arithmetic. Post Keynesian Economics Society.
[53] Perry, N., & Cline, N. (2016). What Caused the Great Inflation Moderation in the US? A Post-Keynesian View. Review of Keynesian Economics, 4(4), 475-502.
[54] Pindiriri, C. (2012). Monetary Reforms and Inflation Dynamics in Zimbabwe. International Research Journal of Finance and Economics(90), 207-222.
[55] Pindiriri, C., & Nhavira, J. (2011). Modeling Zimbabwe's inflation process. Journal of Strategic Studies : A Journal of the Southern Bureau of Strategic Studies Trust, 2(1), 32 – 49. doi:10.10520/EJC51209#
[56] QuartzAfrica. (2021, July 24). qz.com/africa/. Retrieved from qz.com: qz.com/africa/1855919/zimbabwes-reserve-bank-says-ecocash-running-ponzi-scheme/
[57] Reilly, S. (2020). Hyperinflation in Venezuela: How to Address the Problem. Retrieved from repositories.lib.utexas.edu.
[58] Rogers, J. H., & Wang, P. (1993). High Inflation: Causes and Consequences. Economic Review, 1(1993), 37-51.
[59] Sarkar, S., & Giri, B. C. (2020). Stochastic Supply Chain Model with Imperfect Production and Controllable Defective Rate. International Journal of Systems Science: Operations & Logistics, 7(2), 133-146.
[60] Seguino, S. (2019). Feminist and Stratification Theories' Lessons from the Crisis and their Relevance for Post-Keynesian Theory. European Journal of Economics and Economic Policies: Intervention, 16(2), 193-207.
[61] Siklos, P. L. (2000). Hyperinflations: Their Origins, Development and Termination. Journal of Economic Surveys, 225-248.
[62] Skiba, J., Saini, A., & Friend, S. B. (2019). Sales Manager Cost Control Engagement: Antecedents and Performance Implications. Journal of Personal Selling & Sales Management, 123-137.
[63] Sundaynews. (2021, July 4). Local news. Retrieved from The Sunday News: https://www.sundaynews.co.zw/government-nullifies-school-fees-hike/
[64] Swanson, R. (2007). Analysis for Improving Performance: Tools for Diagnosing Organizations and Documenting Workplace Expertise. Berrett-Koehler Publishers.
[65] Totonchi, J. (2011). Macroeconomic Theories of Inflation. International Conference on Economics and Finance Research. 4, pp. 459-462. Singapore: IACSIT Press.
[66] Tradingeconomics. (2021, February 26). https://tradingeconomics.com/zimbabwe/inflation-cpi. Retrieved from Zimbabwe Inflation Rate.
[67] Trevithick, J. A. (1975). Keynes, Inflation and Money Illusion. The Economic Journal, 85(337), 101-113.
[68] UNICEF. (2021, June 10). Zimbabwe unicef.org. Retrieved from unicef.org/zimbabwe/education: www.unicef.org/zimbabwe/education
[69] veritaszim, Education Regulations. (2021, July 24). SI 1998-379 - Education Regulations. Retrieved from https://www.veritaszim.net/node/1115
[70] veritaszim, Mopse, SDC handbook. (2021, July 24). Veritaszim.net School development committee handbook. Retrieved from www.veritaszim.net
[71] Wang, J. (1999). The Georgian Hyperinflation and Stabilization. International Monetary Fund.
[72] Weintraub, S. (1978). Keynes, Keynesians and Monetarists. University of Pennsylvania Press.
[73] Zikhali, W. (2020). Changing Money, Changing Fortunes: Experiences of Money Changers in Nkayi, Zimbabwe. Canadian Journal of African Studies/Revue canadienne des études africaines, 1-18.
[74] Zimbabwe Broadcasting Corporation . (2021, July 4). zbcnews. Retrieved from ZBC: https://www.zbcnews.co.zw/government-still-to-approve-school-fees-hikes/