

# Hyperinflation: What Zimbabwe Can Teach Us

by

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## Part I – Application of Basic Economic Concepts

“Buy spaghetti noodles. We’ll eat them for dinner tonight with half of that pepper in the garden,” Chiyedza tells her brother Themba, with her hand on his arm. “The stores haven’t had any corn meal for a week and now they’re out of bread too.” Themba smiles at his sister, nods, and without a word leaves the little blue and white house for the dusty paths that will take him the half mile to Bulawayo.



The family is very close. They need to be because they live in Zimbabwe, where staying alive is a daily concern. The Mapako family consists of Chiyedza, her sister, brother, and two nieces. Chiyedza’s father died last year and her mother lives far away in a very remote part of the country. Chiyedza is 22 years old and works as a maid in a hotel in the city of Bulawayo. She is a very pleasant individual who speaks English well, in a soft voice. She epitomizes friendly and welcoming Zimbabweans. Her clothes hang on her a bit because she doesn’t have enough to eat. Chiyedza’s sister, Shamiso, is 24 and has AIDS. She tires easily and is unable to work. Brother Themba just graduated from high school, where he was an excellent student, but now has no job because unemployment in Zimbabwe is 80%. Two nieces live with the Mapako family, Sipiwe and Shenzira, ages 14 and 12, because both of their parents died of AIDS.

Soon Sipiwe and Shenzira emerge from the house. “Go down to the railway station and stand by Chitepo Street where people have to wait for the traffic. Sell each cigarette separately and be sure not to break them.” The girls are resigned to their task but long to be in school. They understand that the family needs to eat. “Will you be home by afternoon?” little Shenzira asks, her thin face staring up at Chiyedza. “No, not by afternoon, but when it’s dark.” It is Chiyedza’s day off from the hotel and she will spend the day walking to an aunt’s village in the countryside, hoping to get a goat leg from her aunt’s neighbor. She will carry it back to their township on the outskirts of Bulawayo and Themba will cut it into pieces tomorrow to sell in the Bulawayo market. Chiyedza will then return to her aunt’s village to pay the neighbor, for only after the meat is sold will she have enough money to reimburse him. Shamiso will stay home, for her AIDS saps the strength it would take for her to help.



*Note:* All of the characters in this story are real, but names and places have been changed at the request of the people in the story to protect them from government violence. Photos (by Robert J. Werner) are not of the real individuals in the story.

Chiyedza earns 1,200,000 Zimbabwean dollars (ZWD) a month as a hotel maid. She gets a 20% raise every three months. Themba brings home 600,000 ZWD a month and Sipiwe and Shenzira earn about 200,000 ZWD per month selling vegetables from the garden and re-selling small items like gum and cigarettes.

The Mapako family’s life is so difficult because the economic and political policies enacted by Zimbabwean President Robert Mugabe have wrecked the economy.



Mugabe prints money to fund government spending. Notice that the value of money is deteriorating so much that there is an expiration date on the back of the currency. (See picture above.) Inflation was estimated in the summer of 2007 to be 109,000% (*World Economic Outlook Database*, 2008). With prices rising exponentially, he decreed in June of 2007 that all shopkeepers had to cut their prices in half. If a shopkeeper bought a bag of the staple food mealy meal (ground corn) at 100,000 Zimbabwean dollars, he would have to sell it at 50,000. If the shopkeeper refused, he was jailed or beaten. And to make matters worse, the Zimbabwean government is managed by his corrupt cronies. To pay them, he gives them access to scarce foreign currency which they then sell on the black market at an exchange rate tens of thousands of times higher than the official rate.

The world saw two sides of Mugabe. He came to power in 1980 when Zimbabwe won majority black rule. For the first five years, he pursued moderate government, conventional economic policies, and temperate laws governing race and ethnicity, and was hailed by neighbors and the world as a model new African president. But after that, Mugabe

### Mapako Family's Income and Expenses

All monetary units are in Zimbabwean dollars as of July 2007.

Income per month	
Chiyedza’s salary	\$1,400,000
Themba’s income	\$600,000
Sipiwe and Shenzira’s income	\$200,000
<b>TOTAL</b>	<b>\$2,200,000</b>

Expenses per month	
bread	\$1,800,000
1–6 school tuition	\$83,000
7–12 school tuition	\$166,000
rent	\$700,000
electricity	\$100,000
water	\$250,000
mealy meal	\$1,200,000
sugar	\$150,000
cooking oil	\$800,000

Other expenses	
egg	\$15,000
beef/kg.	\$250,000
chicken/kg.	\$1,400,000
soap/kg.	\$590,000
school uniform	\$1,500,000
shoes	\$15,000,000
school shoes	\$1,000,000
bed	\$20,000,000
T.V.	\$68,000,000
small refrigerator	\$163,000,000
pot & pan	\$5,000,000
AIDS vaccination from public hospital	\$15,000,000
daily bus transportation	\$300,000

Source: prices are based on Chiyedza Mapako’s estimates of the cost of items sold in Bulawayo, Zimbabwe.

showed a dark side. His North-Korean-trained army murdered 20,000 of the rival ethnic group Ndebele in the 1990s. In 2005, Mugabe bulldozed the slums of Harare, the capital, because they were a source of political opposition. The United Nations estimated that he destroyed the homes of 700,000 people. Political opponents are beaten or killed. Mugabe has frightened away tourists, although a few people know that it is safe to visit.

The world has responded with economic sanctions, so Zimbabwe's economy is rather isolated. While U.S. law freezes the assets of government officials, does not recognize their passports, and prohibits trade in arms, the U.S. does export to Zimbabwe. The country's major trading partners are South Africa, China, Botswana, Congo, and Japan. The governments of neighboring countries are reluctant to pressure Mugabe because of his credential of having overthrown colonial rule.

### Questions

1. (*Optional question*) Classify the Mapako family's expenses into eight of the Consumer Price Index categories: housing (H), food (F), transportation (T), medical care (M), apparel (A), education and communication (E), recreation (R), and other (O).
2. If you were Chiyedza Mapako, how would you spend the household salary on a monthly basis?
3. What are the short-run and long-run economic implications of the budget choices you made above?
4. So far our analysis has examined the economic effects of hyperinflation on the micro level. Currently, 75% of the Zimbabwe population is living below poverty and approximately 25% of all adults have HIV/AIDS. Suppose everyone in Zimbabwe is making similar household budget decisions as Chiyedza Mapako. Then what is the macroeconomic effect of the household budget allocation decision? Illustrate your answer using a production possibility frontier (PPF) curve with food/consumer goods on the vertical axis, and education/capital goods on the horizontal axis. Indicate on your PPF curve the location in which Zimbabwe is currently operating (e.g., an interior point or on the curve, a point close to one axis or another).

## Part II – Markets

In 2007, Mr. Mugabe, the President of Zimbabwe, decreed that merchants nationwide must slash prices by fifty percent. People who refused to comply were jailed and their business taken over by the government. “[He] cast the price cuts as a strike not against hyperinflation, but against profiteering businesses that he says [is] part of a Western conspiracy to re-impose colonial rule. In that view, price rollbacks are the government’s countermeasure [to fast-rising prices].”<sup>1</sup>

### Questions

1. If you were a shopkeeper in Zimbabwe, how would you respond to Mugabe’s decree that you must cut your prices in half? (*Hint*: think about short-run and long-run production responses).
2. Explain how Mugabe’s decree would affect the market price and quantity of goods sold. Illustrate this using a graph for mealy meal. (*Hint*: does this decree cause a shift in either supply or demand or does it alter the market price without a shift?)
3. Based on the above analysis, are Zimbabweans consumers better or worse off by having Mr. Mugabe set prices? In general, are price ceilings a good idea? Think about it from both the short- and long-run perspective. What are the short- and long-run implications of placing a price ceiling on all goods? Think about it from both the perspective of consumers and firms.
4. (*Optional question*) What other macroeconomic problems do rapidly rising prices create for Zimbabwe?

<sup>1</sup>Wines, Michael. “Caps on Prices Only Deepen Zimbabweans’ Misery” *New York Times*. August 2, 2007.

## Part III – Property Rights

Land ownership is a major issue in Zimbabwe. Prior to independence, whites acquired most of the fertile farmland. Even after independence in 1980, over 4,000 white farmers controlled about a third of the land, while a million blacks shared approximately the same size area. This discrepancy led to changing land ownership as a major rallying cry against the white government in the 1970s.

While Zimbabwean law requires fair compensation for land acquisition, Mugabe's government has widely ignored it. They encourage poor blacks (and political cronies) to simply take over white farms. Many of them had no agricultural training, leading to a drop in food output on many farms. The United Kingdom gave Zimbabwe considerable aid to help in this resettlement, but most of the purchased land went to Mugabe's military and political personnel, who often did not farm the land at all, further reducing aggregate agriculture output. Zimbabwe used to be a food exporter in the 1970s and is now experiencing widespread hunger, even famine.

While land redistribution is a necessary step to redress colonialism, the government's policies are not putting land in the hands of poor black farmers who know how to farm. Mugabe's government has now commandeered the majority of the white farmers' land without compensation. Furthermore, more than 40% of this land has been given to Mugabe's political supporters. Land owned by foreign nationals has been seized as well.

### Questions

1. What is the macroeconomic impact of Zimbabwe's lack of respect for private property rights (i.e., taking farmland without owner consent)? Think in terms of each of the 4 factors of production (land, labor, capital, and entrepreneurial activity).
2. Zimbabwe is no longer a net producer of food. Why? In answering this question, illustrate how the Zimbabwean government's acquisition of private property affected the per worker production function. (Hint: think about the answers you provided for Question 1 and reread the last paragraph in the introduction.)
3. Strengthening property rights alone is insufficient for the reestablishment of economic growth. Explain why removal of corruption from the judicial system is necessary as well.
4. (*Optional question*) What is the macroeconomic impact of the institutional inequality in the distribution of land across races and the preferential treatment given to one group over another?

## Part IV – Fiscal and Monetary Policy

### Questions

1. The unemployment rate in 2007 was 80% (International Financial Statistics). What can the government and central bank do through fiscal and monetary policy, respectfully, to help alleviate this problem?
2. There is no established definition for hyperinflation, but for the purposes of this class we will define it as a price level increase of more than 50% per year. Using this definition, Zimbabwe has been experiencing hyperinflation since 1999 (see table below). To give you some context, if the annual hyperinflation rate is 60%, then a meal that costs \$10 today will cost \$16 in one year, \$25.60 in two years, and \$40.96 in three years. Will your suggestions given to Question 1 alleviate or worsen the inflationary problems in Zimbabwe?

### Zimbabwean Annual Inflation Rate Since Independence

Date	Rate	Date	Rate	Date	Rate	Date	Rate
1981	12%	1988	10%	1995	26%	2002	199%
1982	17%	1989	15%	1996	16%	2003	599%
1983	22%	1990	15%	1997	20%	2004	133%
1984	14%	1991	47%	1998	47%	2005	586%
1985	11%	1992	46%	1999	57%	2006	1281%
1986	13%	1993	19%	2000	55%	2007	108844%
1987	10%	1994	21%	2001	112%		

*Source: International Monetary Fund. World Economic Outlook Database, April 2008 Edition.*

3. The 2007 inflation rate is in stark contrast with the situation at independence in 1980 when one Zimbabwe dollar was worth more than US\$1. What do you think was the root cause of the exponential rise in inflation in Zimbabwe?



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