

Uta Lange
TW100: Writing project “Cause and Effect”

Hyperinflation

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HYPERINFLATION

Before discussing hyperinflation, we must understand what inflation means. Economists refer to inflation as a sustained rise in the average level of prices. The opposite of inflation is called deflation, the downward movement in the average level of prices. Prices are stable if there is neither inflation nor deflation.

Types of inflation

Today, mainstream economics recognizes three major types of inflation, also called the “triangle model” by Robert J Gordon and based on the theories of John M Keynes.

Demand-pull inflation. This type of inflation results from an increase in aggregate demand. It is caused by high demand for goods at times of low unemployment or a great demand relative to scarcity of supply. Demand-pull inflation is likely to happen when there is full employment of resources and demand is increasing. Prices for scarce products consequently increase because people are willing to pay more for them.

Cost-push inflation (inflation resulting from rising costs of production). This type (also called supply-shock inflation) is caused by large increases in the cost of important goods or services that are without suitable alternatives. Cost-push inflation occurred in the oil crisis of the 1970s, which some economists see as a major cause of the inflation that the Western world experienced in that decade.

Built-in inflation (inflation resulting from past events that persist in the present). This type is often linked to the so-called “price-wage spiral”. It involves workers trying to keep their wages in line with high prices and then employers passing higher costs on to consumers as higher prices as part of a “vicious circle”. Built-in inflation reflects events in the past, and so might be seen as “hangover inflation.”

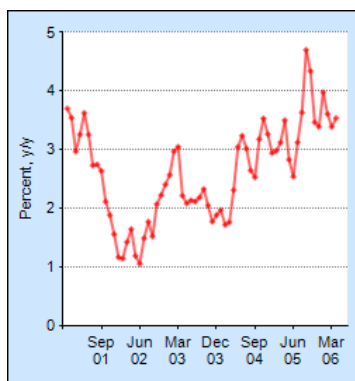


Figure 1: Inflation rate 2001-06 based on CPI in the United States. Source: World Bank

To measure inflation economists compare the price of a typical bundle (basket) of goods today with the price of a typical bundle (basket) of goods in the past. Various indexes measure different aspects of inflation. The best-recognized and well-known index is CPI (consumer price index) that tracks changes in prices of goods and services purchased for consumption by households, called consumer basket.

Currently, the inflation rate in most industrialized countries ranges between 1 and 4 percent. A low level of inflation even seems to have a positive effect on the economy. It appears difficult to renegotiate prices downwards, so that with generally increasing prices it is easier for relative prices to adjust. Complete price stability even may lead to deflation, which is seen as an undesirable outcome. Inflation also gives central banks opportunities to maneuver. Their tool for controlling the money supply is the interest rate — the discount rate at which banks borrow from the central

bank. Since borrowing at negative interest is considered ineffective, a low inflation rate provides central bankers with "ammunition", as it is sometimes called, to stimulate the economy.

Characteristics of hyperinflation

The most widely accepted definition of hyperinflation among economists is that by Philip Cagan who defined hyperinflation as any inflation exceeding 50 percent per month (or 12,875 percent per year).¹ An item that cost \$1 on January 1 would cost \$130 on January 1 of the following year. Unlike inflation, which is at a very low rate sometimes thought to be desirable in an economy, hyperinflation is always regarded as destructive.

Causes of hyperinflation

Hyperinflation is an extreme case of money supply growth exceeding the growth in the production of goods and services in an economy. Excessive money supply growth occurs because the government spends more money than it collects through taxes and charges, leading to the printing of money to fill the gap between revenue and expenditure. This causes the hyperinflation cycle. The public tries to spend the money it receives quickly to avoid the inflation tax; the government responds with even higher rates of money issue.

Effects of hyperinflation

One effect of hyperinflation is the redistribution of wealth. Hyperinflations transfer wealth from the general public, which holds money, to the government, which issues money. Borrowers gain at the expense of lenders when loan contracts are signed prior to the unexpected hyperinflation. Companies that hold stores of scarce materials and commodities benefit relative of the general public.

Hyperinflation reduces the efficiency of an economy by forcing its so-called agents to switch from financial transactions toward barter. While people in modern economies use money for trading, people in hyperinflated economies prefer to pay in commodities. If they are paid in money, they spend that money as quickly as possible. During the great inflation in Germany from 1922-23, workers were paid twice per day and would shop at midday to avoid further reduction of their wages.

How does hyperinflation end?

Hyperinflations end once the rapid money supply stops. Germany undertook a financial reform in 1923, introducing a new currency called the Rentenmark. The government promised that the Rentenmark could be converted into a certain value in gold.

¹ Phillip Cagan wrote *Monetary Dynamics of Hyperinflation* in 1956, generally regarded as the first serious study of hyperinflation and its effects.

Some economists argue that, in addition to a financial reform, a fiscal reform is required to end a hyperinflation. That means the government has to make two credible commitments: a first commitment to halt the supply of paper money and a second to balance its budget. The second commitment is required for a successful reform because it minimizes the incentive for the government to return to inflationary taxation.

Examples of hyperinflation

There have been many examples of hyperinflation throughout history. Hyperinflation often occur[s] ~~red~~ in the aftermath of war when governments print and circulate paper money to finance budget deficits created during a war.

Germany 1922-23

The German economy was prospering in 1914. The German Mark exchanged at 4 or 5 to the dollar. In 1923, when the German hyperinflation was at its peak, the exchange rate between the dollar and the Mark was 1 trillion Marks to 1 dollar. For a wheelbarrow full of money one could not even buy a newspaper. The highest monthly inflation rate of was at 322 percent.²

Germany had lost the war after four disastrous years in 1918. The Treaty of Versailles forced the country to pay reparations in gold-backed Marks. Prices that had already doubled from 1914 to 1919, doubled again during just five months in 1922. Nervous citizens began to get their money out of the currency into real goods — diamonds, works of art, safe real estate. As prices kept on increasing, the amount of currency demanded increased, and the German Central Bank responded by printing more money. Why did the German government not act to halt the inflation? The government was weak and feared unemployment. Communists had tried to take over in 1919, and a higher unemployment rate might give the Communists another chance. German industries like Krupp, Thyssen, Farben, and Stinnes tolerated the inflation — and survived it well. They claimed a cheaper Mark would make German goods inexpensive and easy to export. Inflation kept everyone working.

Table 1: Wholesale Price Index Germany 1914-23

July 1914	1.0
Jan 1919	2.6
July 1919	3.4
Jan 1920	12.6
Jan 1921	14.4
July 1921	14.3
Jan 1922	36.7
July 1922	100.6
Jan 1923	2,785.0
July 1923	194,000.0
Nov 1923	726,000,000,000.0

Source: <http://www.usagold.com/GermanNightmare.html>

Menus in cafes could not be updated quickly enough. A student at Freiburg University ordered a cup of coffee at a cafe. The price on the menu was 5,000 Marks. He had two cups. When the bill came, it was for

² from Hyperinflation by Michael K. Salemi at <http://www.econlib.org/library/enc/Hyperinflation.html>

14,000 Marks. 'If you want to save money,' he was told, 'and you want two cups of coffee, you should order them both at the same time.'... A factory worker described payday, which was every day at 11:00 a.m.: 'At 11:00 in the morning a siren sounded, and everybody gathered in the factory forecourt, where a five-ton lorry was drawn up loaded brimful with paper money. The chief cashier climbed up on top. He read out names and just threw out bundles of notes. As soon as you had caught one you made a dash for the nearest shop and bought just anything that was going.'³

In November 1923, with 1 dollar equal to 1 trillion marks, the breakdown was complete. The currency had lost meaning. The inflation ended when the new currency (the rentenmark) was introduced. The government stated this new currency had a fixed value, and this was accepted

Yugoslavia 1992-94

The former Yugoslavia that emerged from World War II was a federal republic consisting of six states. In 1992, after Slovenia, Croatia, Bosnia and Herzegovina and Macedonia broke away, the remaining republics of Serbia and Montenegro reconstituted the Federal Republic of Yugoslavia. From 1971 to 1991, the average annual inflation rate was 69 percent. At the beginning of 1992, the inflation turned into hyperinflation with more than 50 percent per month. By January 1994, Yugoslavia was suffering from a monthly inflation rate of 313 million percent⁴. The Yugoslav hyperinflation that lasted 24 months was far more bitter than the hyperinflation in Germany from 1922 to 1923.

President Slobodan Milošević ordered the National Bank of Yugoslavia to grant \$1.8 billion in unauthorized credits to Serbian-owned enterprises at the end of 1990. It is believed that this started the hyperinflation. Milošević supported Serbian militias who



Figure 2: National Bank of Yugoslavia 100 Million Dinar 1993. Source: <http://www.million-dollarbabies.com>

were fighting to unite Bosnia and Croatia with Serbia. More money was required for the military machine. Trade sanctions that were imposed by the United Nations on Yugoslavia in 1992 weakened the economy even more. Hence, the Yugoslavian government started to print money. Within 24 months, the per capita income fell by more than 50 percent. People could no longer buy food in the free market. Long lines formed at state stores that irregularly supplied food rations of low quality. For a long time, all of Belgrade's gas stations were closed, except for one that

supplied foreigners and embassy personnel. People changed piles of worthless dinars into single German mark or US dollar notes in a foreign-exchange black market.

By December 1993, 500-billion-dinar bills rolled off the money press, worth 4.15 German marks when printed. In January 1994 prices had increased by 313,000,000 percent in one month. The authorities were unable to keep up printing more

³ from Paper Money by "Adam Smith," (George J.W. Goodman), pp. 57-62.

⁴ from Dinar Inflation by Steve Hanke <http://www.mises.org/story/207>

money. The dinar officially collapsed on January 6, 1994. The German mark was declared the legal substitute for all financial transactions, including taxes. On January 24, 1994, Yugoslavia introduced a new currency, the “super-dinar.” It was attached to the German mark at a rate of one-to-one and was worth 13 million old dinars. The hyperinflation ended.

Zimbabwe today

Zimbabwe’s official monthly inflation rate is 1,730 percent.⁵ It is the world's highest inflation ever. Zimbabwe can best be described as a country in stagflation, that is, high price inflation combined with slow output growth, high unemployment, and recession.

President Mugabe's confiscation of land from white farmers in 2000 triggered a disastrous economic crisis that led to a total collapse in agriculture and production. The government responded to the crisis by spending all the government resources. In May 2006, having spent the governmental reserves, Zimbabwe's authorities stepped up the printing of money. About 60 trillion Zimbabwean dollars were required to finance a recent 300 percent increase in salaries for soldiers and policemen and 200 percent for other civil servants. The money was not budgeted for the fiscal year, and the government did not reveal its source.

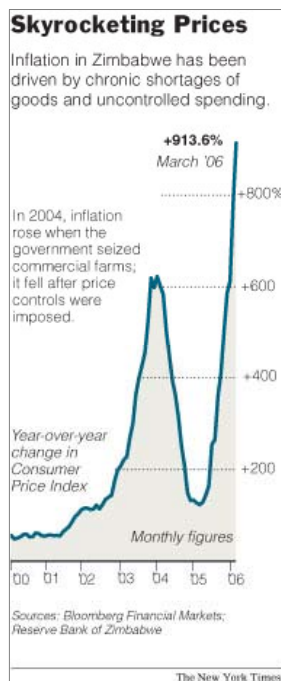


Figure 3: Hyperinflation in Zimbabwe.

Source: Reserve Bank of Zimbabwe, New York Times, May 2006

The current government blames a Western plot for Zimbabwe's problems and has rejected all calls for economic reform. Not only has hyperinflation now bankrupted the government; it has also left 8 in 10 citizens destitute and decimated the number of factories and farms. The latest response of the central bank was to declare inflation illegal. From March 1 to June 30, 2007, anyone who increases prices or wages will be arrested and punished.

Many experts predict that Zimbabwe faces a political confrontation within the next few months. Members of the ruling party argue whether to grant President Mugabe an extended term or to put less-radical members of the ruling party in power. Some believe that hyperinflation can be stopped if a new government takes power. It would have to make a credible promise to stop the printing press and to balance the budget. Furthermore, the economy needs fundamental reform to its inefficient public institutions and proper land tenure so farmers can become productive again. Most of all, the country needs free, fair and open elections.

⁵ from SECOND TAKE - Financial Times, March 16, 2007. <http://www.businessday.co.za/articles/topstories.aspx?ID=BD4A413806>

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