

# Inflation by the Decades: 1980s

By: Steve H. Hanke and Tal Boger

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## About the Series

*Inflation by the Decades* is the most comprehensive free-to-use inflation database. It provides inflation data in digestible formats for countries across the world. These data are provided over each decade from 1950 to 2000. Along with annualized inflation over the decade, we find the cumulative inflation, value of one monetary unit at the end of the decade, and the change in inflation. The dataset used for all reports can be downloaded as an Excel file on the Cato Institute website.

This series repackages the work previously published in 2014 by Prof. Steve H. Hanke and Nicholas Krus<sup>1</sup> to include choropleths, digitized data, and a basic discussion and analysis of trends.

## About the Authors<sup>2</sup>

**Steve H. Hanke** is a Professor of Applied Economics and co-director of the Institute for Applied Economics, Global Health, and the Study of Business Enterprise at the Johns Hopkins University in Baltimore, MD. He is also a Senior Fellow and Director of the Troubled Currencies Project at the Cato Institute in Washington, D.C. On his Twitter, @Steve\_Hanke, Prof. Hanke regularly posts about economic and financial news.

**Tal Boger** is the first high school research assistant at the Johns Hopkins University Institute for Applied Economics, Global Health, and the Study of Business Enterprise. He is a rising senior at Beth Tfiloh Dahan Community High School, and will graduate in June 2019. He can be reached by email at: tboger10@gmail.com

## Methodology

We obtained the data presented in this report from three sources. We used the IMF's International Financial Statistics (IFS) most often. If data were not available via the IFS, we used the World Bank Development Indicators (WBDI). Finally, if data were not available via the IFS or the WBDI, we used data from the Economist Intelligence Unit's Online Database (EIU).

Utilizing these data, we calculated the cumulative inflation rate, the annualized inflation rate, the value of the monetary unit, and the change in the annualized inflation rate. We did so using the following formulas:

$i_x$  = the annual inflation rate for the xth year in the decade

1. Cumulative inflation rate =  $[(1 + i_1) * (1 + i_2) * \dots * (1 + i_{10})] - 1$
2. Annualized inflation rate =  $(\text{cumulative inflation rate} + 1)^{1/10} - 1$
3. Change in annualized inflation rate = (annualized inflation rate in the current decade - annualized inflation rate in the previous decade)
4. Value of 1 monetary unit at the end of the decade =  $1 / (1 + \text{cumulative inflation rate})$

Plotly was then used to create the choropleths.

Only countries that had inflation data available for the entire decade were included in this study to remove any confusion or bias in the table.

<sup>1</sup> See Steve H. Hanke and Nicholas Krus *Inflation by the Decades*, Cato, 2014. Available on the Hanke-Krus "World Inflation and Hyperinflation Table" page on the Cato Institute website (<https://www.cato.org/research/world-inflation-and-hyperinflation-table>).

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# Introduction

## Key Findings

For the 1980s, we recorded inflation data for 111 countries and territories.

In the 1980s, countries in Latin America, the Middle East, and Africa suffered from high inflation.

Elevated inflation rates were especially prevalent in developing countries in these regions. 6 of the 10 most inflationary countries in the 1980s were in Latin America.

Among these 6 countries, Nicaragua, Argentina, Bolivia, Peru, and Brazil all suffered from hyperinflation.<sup>3</sup> Because of the widespread hyperinflation, the 1980s is sometimes referred to as the “lost decade” in many Latin American countries. Specifically, Nicaragua – the most inflationary country in this decade – saw its prices double about every 165 days on average throughout the entire decade.

In addition to hyperinflation in Latin America, Poland and Yugoslavia experienced short hyperinflations near the end of the decade.

Throughout the decade, 21 countries had annualized inflation rates of over 20%, and 52 countries had a rate over 10%.

## World Inflation Choropleth

Figure 1 below shows the annualized inflation in the 1980s of every country and territory for which we recorded data.

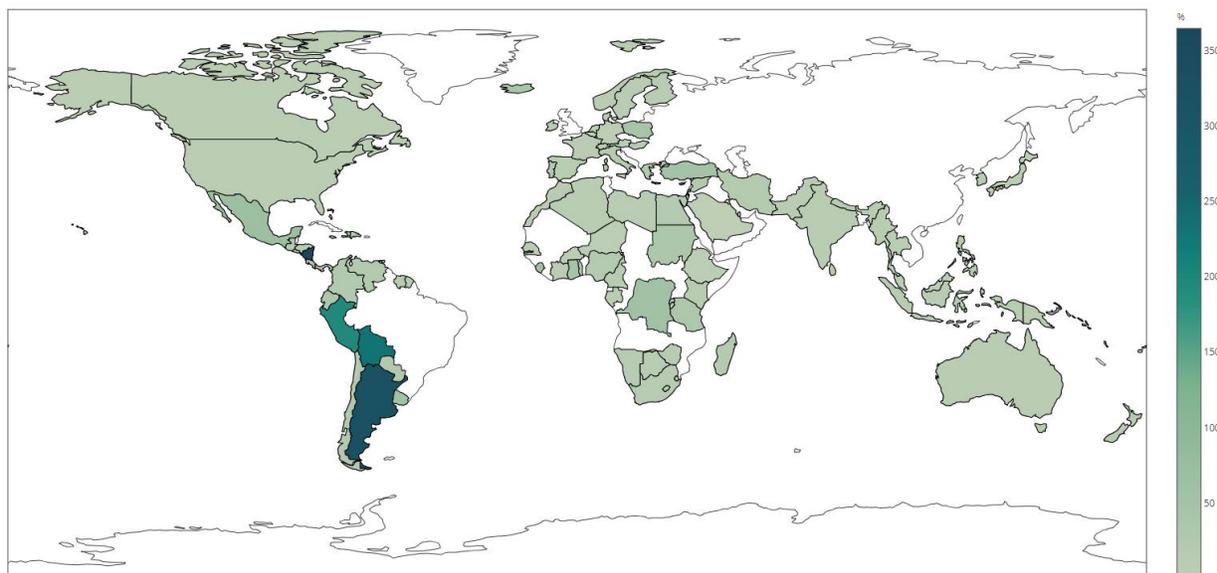


Figure 1. World annualized inflation in the 1980s.

<sup>3</sup> See the latest World Hyperinflation Table. Steve H. Hanke and Erik Bostrom *Zimbabwe Hyperinflates Again: The 58<sup>th</sup> Episode of Hyperinflation in History*, working paper no. 90 in Johns Hopkins University’s “Studies in Applied Economics” working paper series.

# Africa

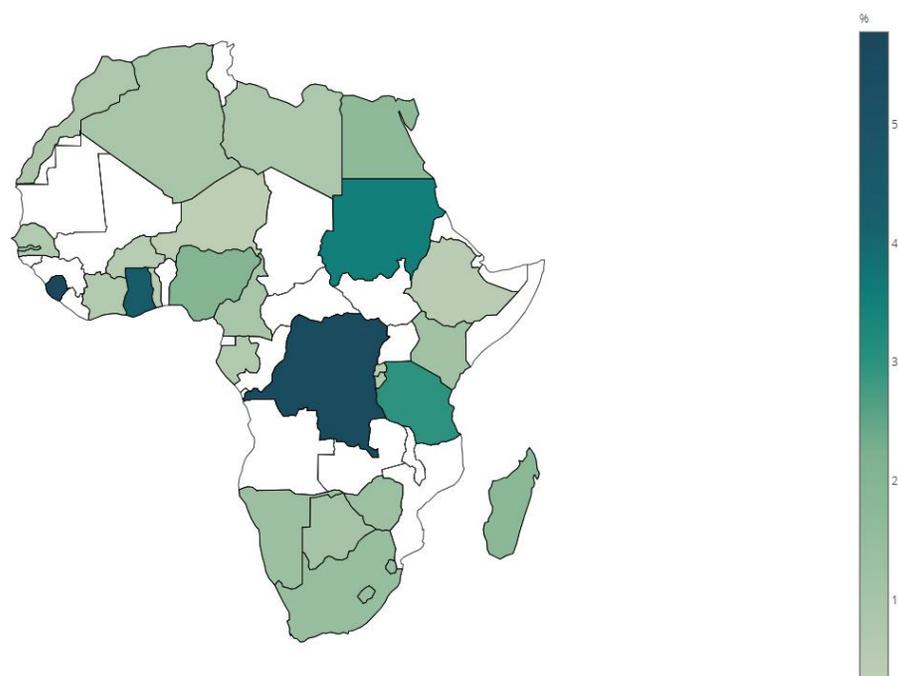
## Summary

In Africa, we measured the inflation for 31 countries. The average inflation for the entire continent was 15.57% with a standard deviation of 14.35%.

In both the 1990s and the 2000s, Africa had the most inflationary country (the Democratic Republic of the Congo in the 1990s and Zimbabwe in the 2000s). However, in this decade, Africa's inflation was much more subdued. The most inflationary country – Sierra Leone – had an annualized inflation rate of 57.74%. This ranked only 8<sup>th</sup> in the world. The next most inflationary countries in Africa were the Democratic Republic of the Congo (55.25%, ranking 10<sup>th</sup> in the world), and Ghana (44.28%, ranking 12<sup>th</sup> in the world).

## Choropleth of African Inflation

Figure 2 below shows the annualized inflation of countries in Africa.



*Figure 2. Africa annualized inflation in the 1980s.*

# South America

## Summary

In South America, we measured inflation for 10 of the 12 countries in the continent. The average inflation was 93.03% (the highest of any continent in this decade), with a standard deviation of 111.60%. Annualized inflation ranged from a high of 319.22% in Argentina to a low of 12.15% in Suriname. The countries highest in our world rankings were Argentina (2<sup>nd</sup>), Bolivia (3<sup>rd</sup>), and Peru (4<sup>th</sup>).

South America struggled with high inflation in this period, and many of its countries hyperinflated in the 1980s. This includes: Argentina's hyperinflation in late 1989, Bolivia's hyperinflation in 1984, Peru's hyperinflation in 1988 and Brazil's hyperinflation in 1989.

Many of these hyperinflations were direct results of the Latin American debt crisis that lasted the early 1980s. Several of these countries' debt outweighed their earning power, causing banks to stop lending overseas to these countries.

This temporary stop in lending ravaged Latin American economies, leading them to recessions, and ultimately, hyperinflation.<sup>4</sup>

## Choropleth of South American Inflation

Figure 3 below shows the annualized inflation of countries in South America in the 1980s.

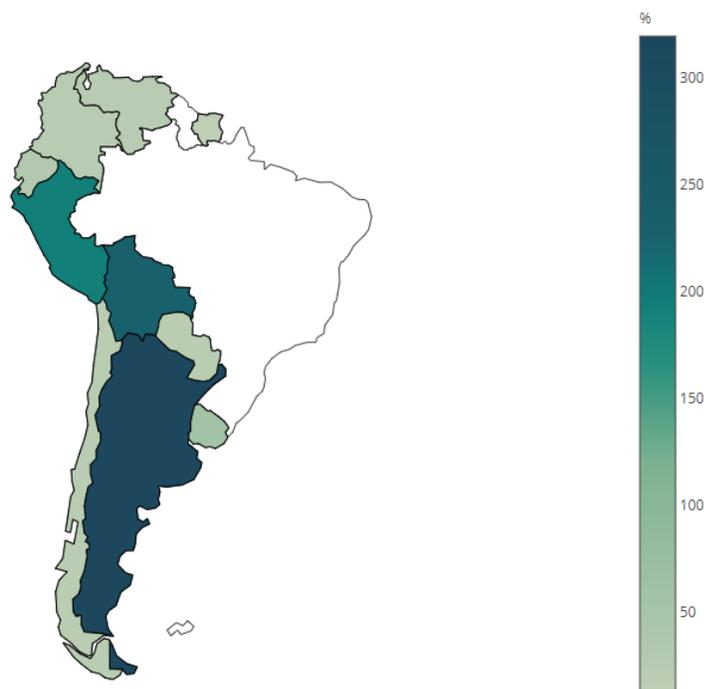


Figure 3. South America annualized inflation in the 1980s.

<sup>4</sup> See Jocelyn Sims, *Latin American Debt Crisis of the 1980s*, Federal Reserve History, <https://www.federalreservehistory.org/essays/latin-american-debt-crisis>.

# North America (including Central/Caribbean)

## Summary

In North America, we measured inflation for 19 out of the continent's 23 countries. The average inflation for the entire continent was 31.41%, with a standard deviation of 81.94%. Annualized inflation ranged from a high of 364.81% in Nicaragua to a low of 3.08% in Panama. Similar to the 1990s, North America had mostly stable inflation with the exception of Nicaragua.

Nicaragua had the highest inflation in the world in this period. The next most inflationary North American countries – Mexico and Costa Rica – had the 7<sup>th</sup> and 18<sup>th</sup> highest inflation in the world, respectively.

## Visualizations of North American Inflation

Because North America is a large continent, with most of its land mass composed of the United States, Canada, and Mexico, it is difficult to see the inflation of Central American and Caribbean countries. So, we have split these up into two different figures. First, we have a choropleth of all of North America. To visualize inflation in Latin America and the Caribbean, we have a color coded dataset according to the severity of the country's inflation.

Figure 4 below is a choropleth of mainland North America's inflation in this decade.



Figure 4. North America annualized inflation in the 1980s.

Figure 5 on the following page is the colorscale of Latin American and Caribbean inflation. The colorscale goes from white for the lowest inflation, light green for the middle inflation, and a darker green for the most inflationary countries.

The US, Canada, and Mexico are excluded from this visualization given that its primary focus is Latin America and the Caribbean

Country	Annualized Inflation
Nicaragua	364.81%
Costa Rica	25.47%
Dominican Republic	19.95%
El Salvador	18.37%
Jamaica	15.33%
Guatemala	11.68%
Trinidad and Tobago	11.67%
Honduras	7.31%
Grenada	6.97%
Barbados	6.80%
Haiti	6.36%
Bahamas	6.24%
Saint Lucia	5.60%
Saint Vincent and the Grenadines	5.36%
Saint Kitts and Nevis	4.69%
Panama	3.08%

Figure 5. Latin America and the Caribbean annualized inflation in the 1980s.

## Europe

### Summary

In Europe, we measured inflation for 21 countries. The average inflation for the entire continent was 10.75%, with a standard deviation of 10.72%. Annualized inflation ranged from a high of 42.54% in Poland to a low of 2.85% in the Netherlands.

At the end of the decade, Poland hyperinflated. Though the hyperinflation lasted less than half a year and was one of the least severe cases of hyperinflation ever recorded, the hyperinflation signified the start of economic instability in Europe. This would be fully realized with the collapse of the Soviet Union and the subsequent hyperinflations in the former Soviet Union countries.

Poland had the 12<sup>th</sup> highest inflation in the world, followed by Iceland with the 13<sup>th</sup> highest inflation. The next most inflationary European country after Poland and Iceland was Greece, which had the 26<sup>th</sup> highest inflation in the world.

### Choropleth of European Inflation

Figure 6 on the following page is a choropleth of Europe's annualized inflation in this decade.

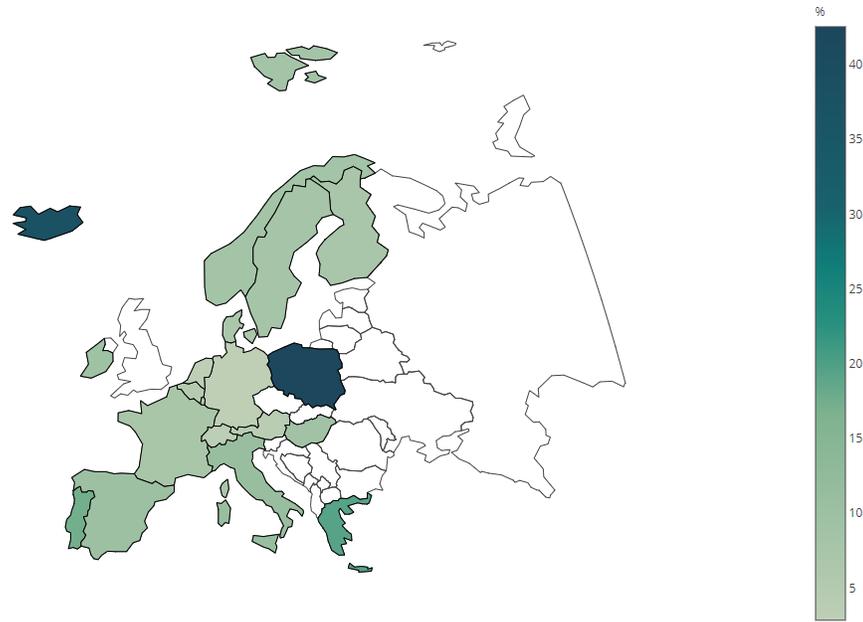


Figure 6. Europe annualized inflation in the 1980s.

## Asia

### Summary

In Asia, we measured inflation for 20 countries. The average inflation for the entire continent was 15.04%, with a standard deviation of 23.73%. Annualized inflation ranged from a high of 104.67% in Israel to a low of 0.05% in Saudi Arabia.

Israel had the 5<sup>th</sup> highest inflation in the world in this period. Many view Israel's high inflation as a part of the broader phenomenon of "Stagflation" in the 1970s. However, because of the Israeli government's full-employment policy, the effects of Stagflation and the oil price rises of the 1970s were not felt until the 1980s.

To combat this inflation, the Israeli government passed the "Economic Stabilization Policy." This allowed the government to freeze prices and exchange rates. Though many viewed this as an unnecessary and reactionary action, the policy helped stop the rampant inflation by the late 1980s.<sup>5</sup>

After Israel, the most inflationary countries in Asia were Turkey – which had the 10<sup>th</sup> highest inflation in the world – and Syria – which had the 19<sup>th</sup> highest inflation in the world.

### Choropleth of Asian Inflation

Figure 7 on the following page is a choropleth of Asia's annualized inflation in this decade.

<sup>5</sup> See *Israel Business & Economy: The Rise & Fall of Inflation*, Updated 2011, Jewish Virtual Library, <https://www.jewishvirtuallibrary.org/the-rise-and-fall-of-israeli-inflation>.



Figure 7. Asia annualized inflation in the 1980s.

## Australia

### Summary

In Australia, we measured inflation for 8 countries. There is some debate over whether the continent of Australia has only 3 countries<sup>6</sup> (Australia, New Zealand, and Papua New Guinea) or about 11-14 (if islands such as Fiji are included).<sup>7</sup> Because we found data for these small island nations, we decided to include them in our analysis for Australia.

The average inflation for the entire continent was 9.95%, with a standard deviation of 2.55%, both the lowest out of any continent. Annualized inflation ranged from a high of 13.16% in Samoa to a low of 6.31% in Papua New Guinea. The countries highest in our world rankings were Samoa (37<sup>th</sup>), New Zealand (43<sup>rd</sup>) and Tonga (47<sup>th</sup>).

### Visualization of Australian Inflation

Because most of the countries in Australia are very small, it would be almost impossible to see them on a choropleth. So, we have used the same method we used for the Latin American and Caribbean countries in North America.

We created a color scale of the data. The countries with the lowest inflation are in white. The middle countries are marked in a light green, and the light green turns darker for the countries as the countries have higher inflation.

Figure 8 on the following page is the annualized inflation for Australia on a three-color scale.

<sup>6</sup> Some who believe Australia is composed of very few countries consider it to be four countries; the three listed along with Indonesia.

<sup>7</sup> According to Worldometers.info, a website offering various data on many countries in the world, Australia is composed of 14 countries. We consider there to be 11 countries, which are listed in the colorscale on the following page. Inflation data for territories is available in the full Inflation by the Decades dataset on the Cato website.

<b>Country</b>	<b>Annualized Inflation</b>
Samoa	13.16%
Solomon Islands	12.51%
New Zealand	11.77%
Tonga	11.29%
Vanuatu	8.80%
Australia	8.39%
Fiji	7.39%
Papua New Guinea	6.31%

*Figure 8. Australia annualized inflation in the 1980s.*

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