

Oil-Rich Venezuela Tips Toward Hyperinflation

By Janet Koech



Venezuela, once the wealthiest nation in Latin America, is suffering a dramatic reversal of fortunes and the worst economic crisis in its history. Though the nation has crude oil reserves of close to 300 billion barrels—the world’s largest such holdings—many Venezuelans go without the most basic goods in an economy plagued by chronic shortages.¹

The economic collapse—the product of falling oil prices, currency and capital controls, and mismanagement that includes printing money to finance government operations—has brought Venezuela to the brink of hyperinflation.

Oil accounts for more than 90 percent of export income in Venezuela and is the largest source of government revenue, according to

the Organization of the Petroleum Exporting Countries (OPEC).² These foreign exchange earnings are, in turn, used to finance imports. Venezuela imports more than 70 percent of its food, and dwindling foreign exchange earnings are creating severe shortages. Economic output declined on a year-over-year basis for eight consecutive quarters through the end of 2015, the latest year for which data are available (*Chart 1*). Growth and inflation outlooks continue deteriorating as the economic crisis deepens.

Venezuela’s inflation is the highest in the world. The International Monetary Fund (IMF) anticipated a 476 percent annual price increase in 2016 and forecasts inflation of 1,660 percent in 2017. Official government data show a 12-month inflation rate of 180 percent in December 2015 (*Chart 2*).³

The country’s economic and monetary developments evoke memories of Zimbabwe at the start of its hyperinflation and subsequent collapse in 2007–09 as well as periods of persistently high inflation in Latin America in the 1990s. This persistently high inflation morphed into hyperinflation—defined as inflation exceeding 50 percent per month—in Argentina, Bolivia, Brazil, Nicaragua and Peru. Other countries—Mexico and Chile—managed to avoid hyperinflation.⁴

Venezuela’s central bank published economic statistics in January 2016 for the first time in a year, confirming that annual inflation had reached triple-digit levels, with anecdotal evidence suggesting that prices have substantially increased since then. The government has increasingly relied on its central bank to print money to finance its spending and fill the fiscal gap created by

Chart 1
Venezuela's Economy on the Decline Since 2014



SOURCES: Banco Central de Venezuela; Haver Analytics.

diminished oil revenues. Rates in the black market, through which much of the economy operates, indicate much steeper currency devaluation.

Lifeblood of Oil

Venezuela's 352,144 square miles on South America's northern coast—wedged between Colombia, Brazil and Guyana—is roughly twice the size of California. The country has a population of 30 million and is rich in natural resources, including gold, minerals and crude oil.

The discovery of oil in 1914 transformed Venezuela's agriculture-dependent economy. By the mid-1920s, oil revenue supplied two-thirds of the state's income and was responsible for more than 90 percent of exports. Oil wealth made it possible for the government to build a network of roads and infrastructure and expand its agricultural and manufacturing sectors. As the world struggled with the Great Depression in the 1930s, the Venezuelan bolivar appreciated nearly 70 percent against the U.S. dollar as oil revenue flowed in.⁵

The strong bolivar made coffee and cocoa exports more expensive and less competitive, impacting the nation's agricultural sector. At the same time, it was a boon for Venezuelan consumers, who could suddenly afford to import just about everything from food to clothes and electronics. Imported goods became commonplace. The strong currency was politically popular, setting off a national spending spree.

Good times didn't last. World War II disrupted global trade, bringing product shortages and economic disarray. Venezuela's economy has since largely mirrored oil-price volatility; robust postwar growth boosted global demand for oil, lifting prices higher. Geopolitical conflicts in the Middle East in the early 1950s further supported oil prices, diverting more funds to Venezuela. By the late 1950s, however, oil prices had drifted lower as Middle East production surged. To combat production and price swings, the world's main oil-exporting countries, includ-

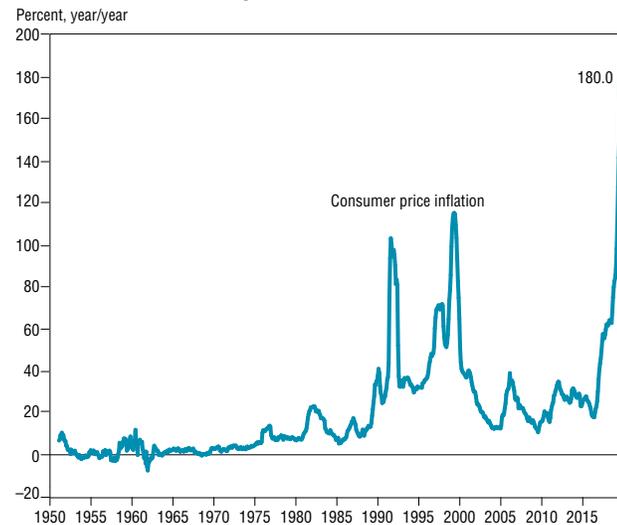
ing Venezuela, formed OPEC in 1960.

The oil embargo of 1973 drove up world energy prices again. Venezuelan government revenue quadrupled from 1972 to 1974, spawning a splurge of public and private consumption.⁶ The government increased spending and nationalized the oil and steel industries. When oil prices began to slip after 1977, Venezuela's growth slowed as interest rates soared, ballooning the nation's external debt to 61 percent of GDP in 1985 from 13 percent in 1976. Oil revenue could no longer sustain a range of government subsidies, price controls and public institutions. Moreover, widespread corruption and political patronage flourished at the expense of economic development. These problems intensified when oil prices declined further in the mid-1980s, leading to slow growth, high inflation and a diminished standard of living.⁷

Expanding energy demand from emerging economies, particularly China, drove an oil-price recovery in the early 2000s. Venezuela's oil revenue rose to levels not seen in two decades. The government channeled the proceeds to expand social-spending programs, often at the expense of reinvestment in exploration and production by the

Chart 2

Venezuela's Inflation Skyrockets



SOURCES: Banco Central de Venezuela; International Monetary Fund World Economic Outlook; Haver Analytics.

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state-owned oil and gas company, *Petróleos de Venezuela*.

Volatile Political History

Venezuela's political history has a recurring pattern: government overspending when oil prices are high with little saving for lean times. During the 1950s, dictator Marcos Pérez Jiménez promised to modernize the country. His government instead became so corrupt and wasteful that one of his infrastructure projects—a nine-mile road linking the capital, Caracas, to the coast—cost \$5.6 million per mile (or \$53 million per mile in 2015 dollars) and was referred to as the “costliest freeway in the world.”⁸

In the 1970s, President Carlos Andrés Pérez also promised to transform Venezuela into a developed nation. However, at the height of the oil boom, in 1974, he ordered the hiring of attendants and operators for every bathroom and elevator in government buildings. The country ended up broke and indebted when oil prices fell a decade later.⁹

Hugo Chávez, the nation's 64th president and leader of Venezuela's socialist movement, the Bolivarian Revolution, prom-

ised to make 21st century socialism possible through government spending. From 1999 to 2014, the government earned more than \$1.36 trillion from oil—more than 13 times the amount of the (inflation-adjusted) infusion of aid under the Marshall Plan, which allowed Europe to recover from World War II. Venezuela's expenditures briefly aided the poor until the economy collapsed yet again when oil prices fell in mid-2014.¹⁰

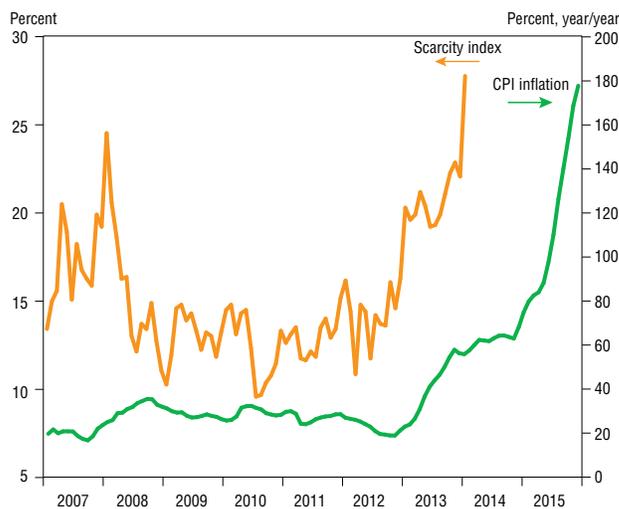
Current President Nicolás Maduro took over following Chávez's death in 2013. Maduro has struggled to maintain his mentor's charisma and popular support amid mounting frustration over widespread shortages.

Price Controls and Shortages

Venezuela's economic crisis is marked by a chronic lack of currency, food and other basics, exacerbated by long-standing price and foreign-exchange controls. These restrictions and the lack of investment in basic infrastructure have eroded Venezuela's productive capacity, making the country overly dependent on imports for its consumption. Yet, foreign currency controls have hindered the ability to pay for imports. Making matters worse, U.S. dollars have been in short supply, the result of an oil-price collapse, which saw prices fall from \$100 per barrel in mid-2014 to as low as \$30 in early 2016 before moving toward \$50 at year-end.

Nearly 1 in 3 goods was missing from supermarket shelves in January 2014, according to the “scarcity index,” a since-discontinued central bank measure of the share of absent food and household items (*Chart 3*). Shoppers' daily struggle is evident in the long lines to purchase limited quantities of hard-to-find necessities. Government-imposed price controls make it difficult to produce and earn a profit, so while supermarket shelves are empty, a thriving black market has developed. In March 2016, goods were more than 17 times costlier on the black market than on the conventional market.¹¹ By August 2016, some goods, including staples, cost 100 times the official price. Milk sold for 7,000 bolivars—more than \$700 at the official exchange

Chart 3
Scarcity Index Shows Venezuela Running Low on Store Supplies



NOTE: The scarcity index measures the percentage of food and household items missing from store shelves. Venezuela's central bank stopped reporting scarcity index data in January 2014 and inflation data in December 2015. CPI stands for consumer price index, a measure of the weighted average prices of a basket of goods and services. SOURCES: Banco Central de Venezuela; Haver Analytics.

rate—or about \$7 if one had U.S. dollars, then worth a bit more than 1,000 bolivars to the dollar on the black market. However, many residents have neither the bolivars to afford black-market prices nor the U.S. dollars to exchange at the favorable rates.¹²

Government-imposed controls restrict imports by limiting dollars available to private-sector companies. The value of imported goods fell 27 percent in third quarter 2015 from the prior-year level—and has declined 47 percent since oil prices peaked in 2012 (*Chart 4*). Price controls and subsidies ensured that many products were much cheaper in Venezuela than in neighboring Colombia, making smuggling to Colombia a profitable business and further exacerbating shortages. More recently, however, the lack of basic goods combined with rising prices has driven Venezuelans to illegally smuggle these products from Colombia.

Capital and Currency Controls

The Venezuelan government has maintained a system of currency controls and a fixed (but adjustable) official exchange rate since 2003.¹³ The government makes dollars available at multiple exchange rates, allowing some companies and individuals to access dollars at preferential rates.

There have been two official exchange rates since March 2016, when the government announced its dual foreign-exchange-rate system. The first rate, known as DIPRO, replaced the CENCOEX rate and is set at 10 bolivars per \$1. This fixed-but-adjustable rate is used for imports of government-authorized priority goods, including food, medicine and raw materials for production. The second rate, DICOM, governs transactions not covered by the DIPRO rate and is allowed to “fluctuate according to the country’s economic dynamics.” The rate had an initial opening of 206.5 bolivars per \$1 on March 7, 2016, and was priced at 686.6 bolivars per \$1 on Jan. 26, 2017. Venezuela previously had a three-tiered official currency-control system.

This multiple-exchange-rate arrangement creates numerous opportunities for

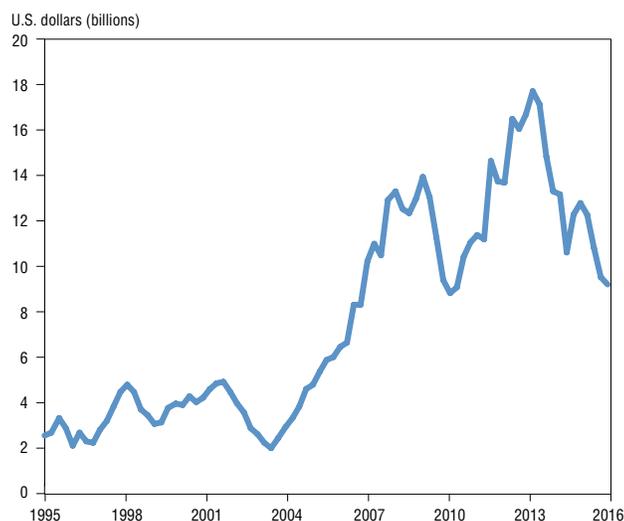
arbitrage. For instance, at the beginning of 2017, a cup of coffee at a bakery cost 1,100 bolivars—equivalent to \$110 or \$1.63, depending on which of the two exchange rates was applied. The dollar-denominated price is much cheaper if the black-market rate is applied.¹⁴

Venezuela has experienced a series of currency devaluations associated with its surging inflation. In 2007, the government introduced a new currency, the bolivar fuerte (the strong bolivar)—the old bolivar with three trailing zeroes removed. Although the devaluation made everyday transactions easier, it failed to address the country’s underlying lack of economic discipline and policies that undermined sustainable economic growth.

The government devalued the currency in January 2010, from 2.15 bolivars to 2.6 bolivars per \$1 for an assortment of food and health care imports and to 4.3 bolivars for other imports such as cars, petrochemicals and electronics. Two years later, the currency was devalued again, to 4.3 bolivars for both classes of goods. Once more, in February 2013, the bolivar was devalued to 6.3 bolivars amid rising budget deficits. Most recently, in February 2016, President Maduro cut the

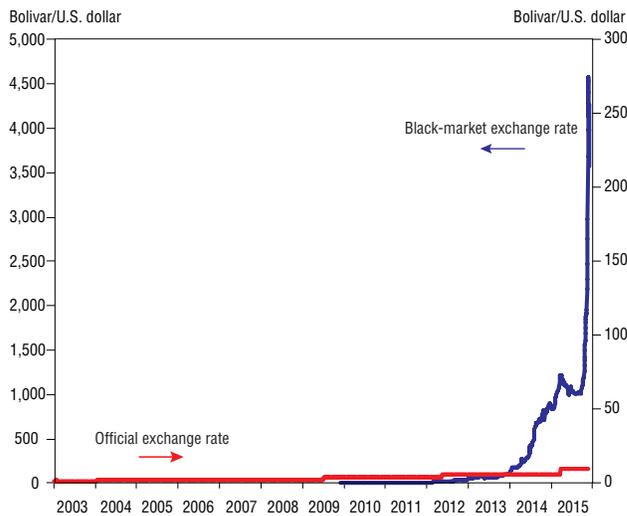
Chart 4

Imports to Venezuela Decline in Recent Years



SOURCES: Banco Central de Venezuela; Haver Analytics.

Chart 5

Venezuela Currency Depreciates Sharply on Black Market

SOURCES: Federal Reserve Board; DolarToday; Haver Analytics.

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official exchange rate to 10 bolivars per \$1.

Chronic shortages have inflated the black-market value of the bolivar, which traded upward of 3,600 per \$1 in January 2017—far above official exchange rates (*Chart 5*).¹⁵ The largest bill in circulation in November 2016—the 100 bolivar note—was worth \$10 at the official exchange rate and pennies at the black-market rate. The bolivar, its purchasing power evaporating, has left Venezuelans carrying increasingly large wads of cash to purchase everyday items.

A large cup of coffee, costing 1,100 bolivars, required 550 of the lowest, 2-bolivar-denomination currency and 11 of the 100-bolivar notes at the beginning of the year. Newly denominated currency—including 20,000-bolivar notes—was rolled out in mid-January.¹⁶ With the IMF forecasting that inflation will reach 1,660 percent in 2017 and 2,880 percent in 2018, purchasing power will quickly erode further.

Inflation, Price Stabilization

Venezuela's economic situation is increasingly reminiscent of the beginning of high-inflation episodes elsewhere in Latin America and in Zimbabwe (*Chart 6*). Periods of economic and financial crisis in the latter

half of the 20th century accompanied the Latin American bouts of rapid currency depreciation. A measure of price changes in nine of the most populous countries in the region shows that inflation averaged nearly 160 percent per year in the 1980s and 235 percent per year in the first half of the 1990s.¹⁷ Some countries experienced hyperinflation. Since the mid-1990s, however, inflation rates have universally declined, mostly to the single digits.

Large budget deficits financed by money creation are characteristic of high-inflation episodes. Underlying causes include declining export earnings due to falling commodity prices, government overspending on programs not financed through taxes or borrowing, and a lack of central bank independence resulting in monetization of debt. Overexpansive fiscal and monetary policies are generally followed by wage and price controls that create bottlenecks and shortages, resulting in currency overvaluation, capital flight, declining tax revenues, increasing external debt and accelerating inflation.

In Argentina, Brazil and Bolivia, hyperinflation culminated in a lengthy deterioration in the countries' fiscal accounts and increased fragility in the financial system due to a regional debt crisis and a tendency to accept high inflation. Argentina experienced repeated cycles of hyperinflation followed by attempts at stabilization. Its stabilization program and emergence from debt default included the elimination of the budget deficit, privatization and monetary reform that included a new currency whose value was rigidly fixed against the U.S. dollar.¹⁸ The government, however, defaulted on its debt during this high-inflation period.

In 1994, Brazil implemented its “*real* plan” that successfully ended more than a decade of chronic inflation. The plan included the introduction of a new currency, the *real*, combined with fiscal and monetary policies that restricted government expenses and raised interest rates.

Bolivia set on the path to hyperinflation because of an overvalued currency, a large

fiscal deficit and external debt, and an abrupt reversal of foreign capital inflows. Mexico and Chile endured periods of high inflation before successfully reducing price increases that could have led to hyperinflation.

Mexico maintained a regulated floating-rate regime from 1985 to 1991, followed by an exchange rate band until late 1994. That year, the band became unsustainable amid market instability and a speculative attack on the Mexican central bank’s international reserves. Additionally, a leading presidential candidate was assassinated, a rebel uprising in southern Mexico was renewed and U.S. interest rates rose.

In response, Mexico’s foreign exchange commission adopted a floating currency—which remains in place—prompting a sharp peso devaluation and financial crisis. Under

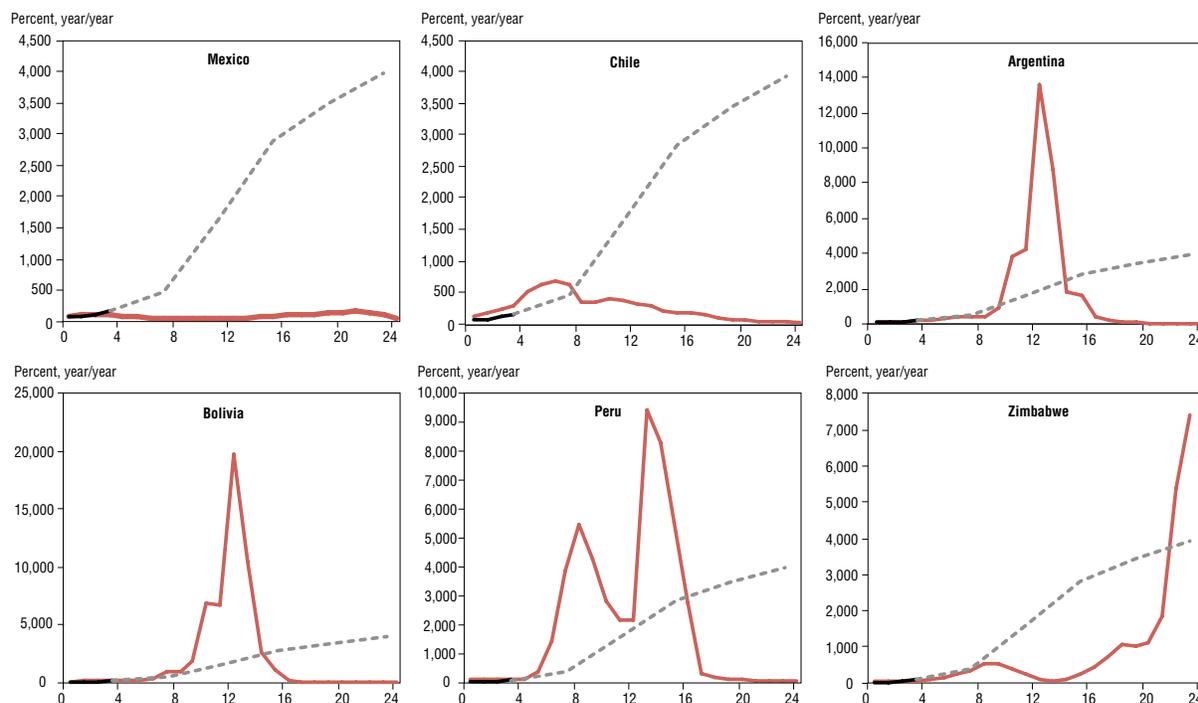
a 1994 constitutional amendment, Banco de México was granted autonomy under which it has set annual inflation targets since 1996. Average annual inflation fell to the single digits in 2000, where it has remained. Similarly, Chile adopted an inflation target in 1990, which contributed to gradually declining price increases.

In Venezuela, the government has printed more currency to finance its spending. These factors have produced the highest inflation in the world.

Dealing with the Economic Crisis

Venezuela’s economic crisis is most directly linked to the mismanagement of its oil wealth—a combination of corruption, ambitious social spending and a lack of savings or investment in the oil industry. The govern-

Chart 6
How Venezuela's Inflation Compares with Other High-Inflation Countries



NOTES: The charts plot the evolution of consumer price index (CPI) inflation over six years (24 quarters) for a sample of high-inflation countries from the time year-over-year inflation first exceeded 80 percent. The black solid line is the evolution of Venezuela’s inflation in 2015, and the dashed lines are estimates of Venezuela’s annual CPI inflation for 2016–20 from the International Monetary Fund.

SOURCES: National statistical offices; International Monetary Fund; Haver Analytics; author’s calculations.

To compound the currency crunch, the Venezuelan government announced on Dec. 12, 2016, that it would withdraw all 100-bolivar bank notes from circulation, giving Venezuelans 10 days to exchange the old bills for new ones at the central bank.

ment has been repeatedly caught unprepared when oil prices have collapsed. The quantity theory of money indicates that sustained high growth rates of a nation's money stock in excess of its production of goods and services eventually produces high and rising inflation rates. This is what economist Milton Friedman referred to when he said, "Inflation is always and everywhere a monetary phenomenon."

Venezuela responded with price controls. Such controls inevitably lead to shortages because they encourage demand at a price lower than what goods would otherwise cost. Profit margins get squeezed and shortages worsen when foreign exchange earnings, used to pay for imports, decline. Government-imposed currency and capital controls also limit access to foreign currency for imports of intermediate goods used in production, triggering additional shortages. A thriving black market emerges for the trade of goods and currency, though at much higher than officially set rates.

Consumer prices increased at an average annual rate of 40 percent in 2013, climbing to 62 percent in 2014. The pace of increase accelerated through 2015, reaching 122 percent. By December 2015, year-over-year inflation was at 180 percent. Although the government stopped publishing inflation data more than a year ago, evidence is mounting that inflation has worsened.

In the absence of official statistics, some analysts now track the prices of specific items to get a sense of price increases. For instance, Bloomberg News' Bloomberg Café Con Leche Inflation Index tracks the price of a cup of coffee at a bakery in Caracas. The price soared from 450 bolivars a cup to 1,100 bolivars over a span of 22 weeks ended Jan. 18, 2017—an annual inflation rate of 768 percent.¹⁹

One U.S. dollar brought 3,684 bolivars on the black market on Jan. 25, 2017, up from 960 bolivars 12 months earlier and from 185 bolivars two years before. This steep devaluation reflects a loss of confidence in the government. Venezuelans resorted to

weighing stacks of bills to pay for basic items instead of counting them individually before the government introduced new, higher-denominated currency in January 2017.

The larger bills offer only temporal relief, not a solution to the inflationary distortions. Indeed, other countries encountering a similar situation have found that larger-denominated currency often leads to episodes of even higher inflation or hyperinflation, as was the case in Austria, Germany and Hungary after World War I and Zimbabwe in 2008. The Zimbabwe government issued the world's greatest denomination, the 100 trillion-dollar bill, shortly before the currency was abandoned in favor of the U.S. dollar in 2009.²⁰

To compound the currency crunch, the Venezuelan government announced on Dec. 12, 2016, that it would withdraw all 100-bolivar bank notes from circulation, giving Venezuelans 10 days to exchange the old bills for new ones at the central bank. President Maduro called the 100-bolivar bills instruments of an "economic coup" to destabilize his government and said that the move would strike a blow at "international mafias" that hoarded cash. Colombian shoppers and organized criminals were buying up the 100-bolivar bills to go shopping in Venezuela, he said, worsening the shortages of basic goods. He ordered the closing of the border with Colombia to counter "bolivar smuggling."

The withdrawal of the nation's largest-denomination note came well before replacement bills were available. Maduro backtracked on his decision after a lack of fresh banknotes sparked unrest. The government rolled out new replacement banknotes ranging from 500 to 20,000 bolivars in January.

Cautionary Tale

Typically, adoption of an independent central bank has stabilized chronic inflation episodes. It is part of a strategy that often includes an alteration in the fiscal regime and the institution of a credible exchange-

rate stabilization mechanism. The adoption of the U.S. dollar to replace the local currency immediately ended Zimbabwe's hyperinflation, while Latin American countries used a combination of stabilization programs to rein in inflation.

So far, Venezuela's measures to deal with its economic crisis have been lacking. Apart from a rise in the price of heavily subsidized gasoline and a devaluation of the essential-goods exchange rate (from 6.3 to 10 bolivars per U.S. dollar in February 2016), the administration continues to print money while maintaining currency and price controls.²¹ The country's money supply increased 458 percent from the beginning of 2015 to January 2017, sending prices sharply higher (Chart 7). To keep up with the rising prices and erosion of the currency's value, Maduro raised the minimum wage 50 percent in January 2017, the fifth increase in a year. He also appointed a political supporter to run the central bank.

Through the mounting crisis, Venezuela confronts the difficult task of shoring up its economy at a time when the conditions that previously buoyed growth—stronger global growth and higher commodity prices—are less supportive. A recent oil-price uptick has provided little relief. The larger-denominated currency will ease the difficulty of simple transactions, but it doesn't solve the underlying causes of inflation. As the citizens struggle to make ends meet, they are left to wonder how much worse economic conditions can get and what kind of future their resource-rich country faces.

Resolution of Venezuela's situation remains elusive, though the crisis is a manifestation of how corruption, mismanagement and an addiction to oil can quickly erode the fortunes of a country.

Notes

¹Venezuela is the country with the world's most proven crude oil reserves, according to the 2015 *Annual Statistical Bulletin* by the Organization of the Petroleum Exporting Countries (OPEC).

²Venezuela's oil revenues accounted for about 95 percent of export earnings in 2015. See note 1.

³Prior to the January 2016 data release, no data were issued for more than a year.

⁴"The Monetary Dynamics of Hyperinflation," by Phillip Cagan, in *Studies in the Quantity Theory of Money*, Milton Friedman, ed., Chicago: University of Chicago Press, 1956, pp. 25–117.

⁵See *Crude Nation: How Oil Riches Ruined Venezuela*, by Raúl Gallegos, Lincoln, Neb.: Potomac Books, University of Nebraska Press, 2016, p. 60.

⁶"Inflation Dynamics in Latin America," by Carlos Capistrán and Manuel Ramos-Francia, *Contemporary Economic Policy*, vol. 27, no. 3, pp. 349–62.

⁷Venezuela's annual consumer price inflation reached 100 percent in 1996, and its standard of living declined to 1960 levels—21 percent below its 1977 peak.

⁸See note 5, p. 67.

⁹See note 5, p. 73.

¹⁰See note 5, p. 15.

¹¹"A Day Out at the (Black) Market in Venezuela," by Scott Tong, American Public Media, March 23, 2016, www.marketplace.org/2016/03/23/world/resource-curse/day-out-black-market-venezuela.

¹²"Venezuela: Where Flour, Pasta and Milk Can Cost a Month's Pay," by Flora Charner and Rachel Clarke, CNN, Aug. 2, 2016, www.cnn.com/2016/08/02/americas/venezuela-food-prices.

¹³In 2003, President Hugo Chávez imposed currency controls to stem capital flight after an oil workers' strike. At the time, \$1 could fetch 1.6 Venezuelan bolivars. Today, that same dollar can buy 172 bolivars at the official government exchange rate, a devaluation of more than 99 percent.

¹⁴As of Jan. 6, 2017, \$1 was worth 10 bolivars at the DIPRO rate, 675.4 bolivars at the DICOM rate and 3,241 bolivars on the black market.

¹⁵Data are from DolarToday, dolartoday.com.

¹⁶"2.75 Million New Banknotes Enter into Circulation in Venezuela," by Jeanette Charles, *Venezuelanalysis.com*, Jan. 18, 2017, <https://venezuelanalysis.com/news/12888>. Since Jan. 16, 2016, Venezuela has issued banknotes in denominations of 500, 5,000, and 20,000. In all, six new banknotes will be issued, with 1,000, 2,000 and 10,000 denominations expected at an as-yet-undisclosed time.

¹⁷"Inflation in Latin America: A New Era?" speech by Ben S. Bernanke, Federal Reserve Board of Governors, Feb. 11, 2005. The nine countries are Mexico, Colombia, Venezuela, Brazil, Bolivia, Uruguay, Peru, Argentina and Chile. Inflation is weighted by each country's gross domestic product.

¹⁸"Stopping Three Big Inflation: Argentina, Brazil, and Peru," by Miguel A. Kiguel and Nissan Liviatan in *Reform, Recovery, and Growth: Latin America and the Middle East*, Rudiger Dornbusch and Sebastian Edwards, eds., Chicago: University of Chicago Press, 1995, pp. 369–414.

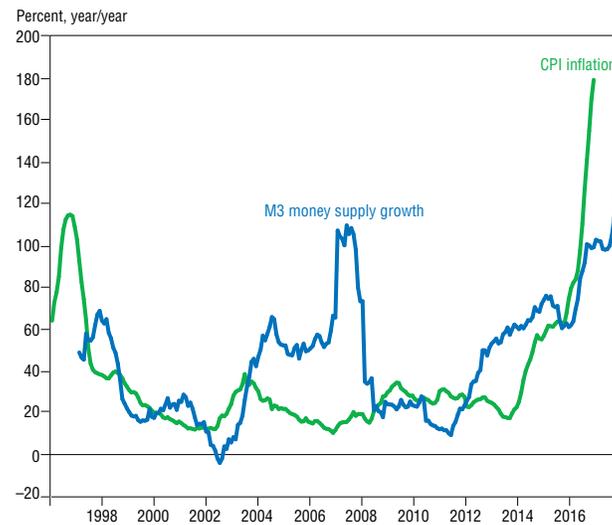
¹⁹See the Venezuelan Café Con Leche Index, Bloomberg, www.bloomberg.com/features/2016-venezuela-cafe-con-leche-index.

²⁰"Hyperinflation in Zimbabwe," by Janet Koech, Globalization and Monetary Policy Institute 2011 Annual Report, Federal Reserve Bank of Dallas, 2012, pp. 2–12.

²¹The government increased the price of gasoline to 6 bolivars a liter from 9.7 centavos in February 2016. This is a 60-fold increase and equivalent to about 11 U.S. cents per gallon, but prices remain one of the cheapest in the world.

Chart 7

Money Supply, Inflation Substantially Increase in Tandem



NOTES: M3 is the broadest definition of monetary assets available in an economy. CPI stands for consumer price index, a measure of the weighted average prices of a basket of goods and services.

SOURCES: Banco Central de Venezuela; Haver Analytics.