# HYPER-INFLATION



# A SURVIVAL GUIDE FOR INVESTORS



# **Hyperinflation Survivial Guide**

magine what it would mean for you and your family if your money lost most or all of its "purchasing power." Imagine actually having money, even *lots* of it, and yet being unable to actually buy anything.

As unbelievable as that sounds, it has happened already before, not once but many times throughout history. It's called **Hyperinflation**, a condition where money becomes almost worthless.

What would you pay your mortgage with? How would you pay your landlord? You'd literally have to barter for your family's basic needs. You might trade a silver ring for a tank of gas, or your golf clubs for a bag of groceries.

Just like during the Great Depression of the 1930s, tar paper shacks would appear in every city, as millions lost their homes. You'd spend endless hours on bread lines and at soup kitchens.

And worst of all, your dreams of one day retiring to a life of ease would be shattered. No money means no days spent with grandchildren. It means no vacationing in Europe and Asia. Your "golden years" would turn into an endless string of days spent struggling just to get by.

Millions of people would be in the same sinking boat. Some would just take what they needed by force. Violent crime would skyrocket. People would look for scapegoats, and would find them. You'd see riots in the streets and worse than riots on the evening news.

Outbreaks of hyperinflation have occurred throughout history, even throughout recent history—in countries as different as Hungary, China, Brazil, Zimbabwe and, most devastatingly, in Weimar Germany following the First World War.

You probably already know about the infamous German hyperinflation. But what you might not know, and what this report will show you, is that there are disturbing signs that something like what happened in Germany in the 1920s could be happening again, right here in America.

his Hyperinflation Survival Guide is intended to get your attention ... so you can discover for yourself what you need to know to be prepared for your future.

Not everyone follows the Dow, or the S & P, or the debates over government debt. Not everyone cares about the Consumer Price Index or the changing prices of gold, silver, oil and other commodities. In fact, many people find economics, finance and politics boring or irrelevant.

I think those are shortsighted, perhaps even dangerous attitudes. If you're uneducated about money and finance, you're as vulnerable as a medieval subject who knew nothing about farming

or fishing or herding. Because in a modern economy, money is literally "the stuff that life is made of."

Forewarned is forearmed, and there is nothing—literally, nothing—that more effectively "arms" the modern citizen than a practical, well-grounded understanding of the workings of money and markets. There are steps you can take *now* to protect yourself, your wealth, and your family, should the worst come to the worst.

We'll begin with ...

#### ... A Primer on Money and Hyperinflation

he possibility of hyperinflation striking the United States seems crazy to some. Yet we live in unprecedented economic times. Government spending is higher than ever. Debt is piling up. The Fed prints money like there's no tomorrow. Already prices, especially the prices of food and energy, have started rising.

And while this goes on in plain sight, our leaders assure us that spending will, someday and somehow, be brought under control. There is no risk of inflation, let alone *hyperinflation*, they say.

History says something else.

Generally, hyperinflation means any extended period in which price inflation is "out of control." Some economists define it as a greater than 100% increase in the Consumer Price Index (CPI) occurring for at least a year. The CPI is a monthly estimate, produced by the U.S. Department of Labor Statistics, which measures changes in the prices of things that "households" typically buy. As you'll see shortly, there is some doubt as to its reliability.

All agree that hyperinflation is a phenomenon that typically strikes countries that use a "fiat" currency. A fiat currency is a currency (money) that is not "backed up" by anything having "intrinsic value," such as gold or silver. In a fiat-money based system, the only thing keeping inflation in check is a monetary policy that keeps the "money supply" broadly abreast with GDP, or the "state of trade." Here's what that means.

Imagine a fictional economy with a "monetary base" of a hundred \$1 bills, and a GDP of one hundred Big Macs. Let's say that Big Macs cost \$1 each. That's a perfect match between money and the "things that money can buy."

Now imagine that Fed Chairman Ben Bernanke prints an additional hundred \$1 bills. Our fictional economy still only has one hundred Big Macs, but it now has a monetary base of \$200, two hundred \$1 bills. So what will happen?

People will "bid up" the price of Big Macs. In time, Big Macs will cost \$2 each. That is how the printing of money causes inflation.

*Precisely* how far do prices need to rise before we are "officially" experiencing hyperinflation? No one can say, but we don't need a precise definition in order to watch for and defend against it

This report uses a practical guideline. Hyperinflation is any rate of inflation that destroys an affluent person's savings in a short period of time. And, as you'll soon see, even a "low" rate of inflation can do just that.

Even worse,

#### America Just Crossed the 'Bernholz Line'

In 2003 Dr. Peter Bernholz, economic historian and Professor Emeritus at the University of Basel, Switzerland, published *Monetary Regimes and Inflation: History, Economic and Political Relationships*. He examined episodes of hyperinflation from Roman times thru the present. What he discovered is keeping some people up at night.

Bernholz discovered that hyperinflation is caused by a particular relationship between what a government borrows (its debt), and what it receives in the form taxes and other sources (its revenue.) Bernholz writes,

The figures demonstrate clearly that **deficits amounting to 40 percent or more of expenditures cannot be maintained. They lead to high and hyperinflations**, reforms stabilizing the value of money, or in total currency substitution leading to the same result. (Emphasis added.)

In other words, <u>once a government begins borrowing 40% of its annual budget, hyperinflation</u> may be around the corner.

Since writing his book, Mr. Bernholz has only offered a few updates, like this one from his 2009 article in *The American*.

[L]et me state two facts which in my view cannot be denied: First, that the present crisis has been initiated by the Federal Reserve's too expansionary monetary policies after the bursting of the New Economy Bubble. Second, that the Fed and the U.S. government embarked on even more expansionary policies to fight the present crisis; indeed, their policies constitute an experiment on a scale which has never been seen before in the history of fighting crises. ...

By analyzing many historical examples, I illustrated how hyperinflations resulted whenever 40 percent or more of government expenditures were financed by money creation. Since it is expected that about 42 percent of U.S. expenditures will be financed by credits this year, some fear the emergence of hyperinflation in the United States. (Emphasis added.)

And on August 3, 2011, Daniel Wagner of AP Business Writers reported, "The U.S. government currently borrows 40 cents of every dollar that it spends." We've crossed the Bernholz Line. So what can we expect?

I contacted Mr. Bernholz while researching this paper, and on August 18, 2011 he provided an updated outlook (emphasis added):

I came to the conclusion that if the monetary base (the money created by the Fed), which has increased by 210 % since the end of 2007, is not diminished adequately in time we might see a US inflation of about 17% annually in a few years, judging from historical evidence. But because recovery after a bubble involving housing and building markets is usually slow and weak it may take several years until this occurs.

A 17% rate of inflation is plausible because the government is already borrowing at least 40% of its budget, and because the Fed shows no inclination to stop its expansion of the money supply. The Fed is not likely to "tighten" because the Fed, despite its theoretical independence, is a creature of politics and will ultimately "toe the party line."

When the government says, "Print more money, buy more assets from the banks, and then flood those banks with the newly-printed cash," Chairman Bernanke is not likely to resign in protest. He's more likely to launch a further round of so called "quantitative easing", and cause the inflationary outlook to worsen.

When you combine a long-term trend of government over-borrowing with a printable fiat currency you have a recipe for sustained, damaging inflation.

The good news is that you have the opportunity to prepare before ...

#### Your Golden Years Rust Away

n times of hyperinflation, bonds and other low-yielding assets (CDs, savings accounts) are particularly vulnerable, as are the millions of retirees living on fixed incomes. Let me illustrate what even a "low" level of hyperinflation can do. (You can examine this entire example in Appendix A.)

The Joneses retire this year, (call it Year 1). They are 62 years old, and their financial circumstances seem strong, even enviable.

They receive \$2,500 a month in Social Security and an additional \$2,500 each month from, their 401(k). That's \$60,000, pre-tax, each year. Throughout their working lives, the Joneses were prudent investors and savers, and they built up a sizeable nest egg.

So in addition to their social security and pension, they also enjoy a 5% yearly return on their \$500,000 portfolio, or \$25,000. So in Year 1 they "gross" (60,000 + 25,000) \$85,000. After taxes of, say, 20% they are left with \$68,000.

Assume they consume the entire \$68,000, which is reasonable for an affluent retired American couple in 2011. After all, a single trip abroad can cost \$15,000.

In a world with no inflation, they would continue on their affluent round, year after year. But Mr. and Mrs. Jones, along with the rest of America, have crossed the Bernholz line, and so **they face a 17% annual rate of inflation**.

It's now Year 2. The Joneses receive their expected \$60,000 from Social Security and their 401(k). They still earn \$25,000 on their portfolio. And they still pay the same 20% in taxes.

But their expenses in Year 2 have gone up 17%, from \$68,000 to \$79,560. If the Joneses want to live like the Joneses of old, they will need to spend \$11,560 of their savings to make up the difference.

Now it's Year 3. The Joneses portfolio/savings still earns 5%, but it's 5% of a <u>new, shrunken portfolio</u>—it's 5% of \$488,440, or an income of \$24,422. And they're still on the wrong side of the Bernholz line, so their expenses will have risen an additional 17%, from last year's \$79,560 all the way up to this year's \$93,085.

The difference between the Joneses current expenses (\$93,085) and their current income (\$67,537) is \$25,547. So they dip into their savings again, which draws it down to \$462,893, a far cry from the \$500,000 they started with, and they're only in Year 3.

You may wonder, "Can't they cut back on their expenses and then **add** to their portfolio, to keep themselves abreast with inflation?"

Perhaps they could, but history, psychology and economics argue strongly that they will not.

James S. Duesenberry, who was an economics professor at Harvard University from 1955 until 1989 gained fame for his "Relative Income Hypothesis." Duesenberry's work shows clearly that people will act to "protect" their standard of living—they will incur debt and spend their savings rather than face a fall in lifestyle.

You see where this scenario is taking the Joneses. **By Year 9 they have lost their entire savings**. Their income from Social Security and pension or 401(k) is only \$60,000, and their expenses, thanks to 17% hyperinflation, are an eye-popping \$209,600. (Again, Appendix A tells the entire story.)

Obviously the Joneses have to reduce their standard of living dramatically, even traumatically. After massive austerity they bring their expenses down to \$60,000, barely a quarter of what they would need to live like they were living when they first retired.

And next year? They'll have to reduce expenses another 17% to offset the 17% inflation that has now become a fixture of life. *The Joneses are now 71 years old, and they are running out of the means to stay alive*.

And remember: 10,000 Baby Boomers will turn 65 every single day for the next 18 years. That's almost 66 million Americans retiring by 2029. No one knows for certain whether Social Security will survive the strain.

Moreover, advances in medical technology make it probable that any American retiring at 65 will need to be adequately funded—despite inflation—for 20 years or more.

So the moral of the Jones' story is: <u>you must be prepared to pay your way during your retirement years.</u> The prudent individual investor would do well to heed Bernholz's forecast of 17% inflation, and to begin defending against it. In a moment I'll say more about how to do that.

But first, here's a disturbing fact. You may not know it but ...

#### The U.S. Government is Cooking the Books

he government tracks an array of "economic indicators" that tell an official inflation story. Others track those same indicators, and yet tell a different story. What's going on?

According to an alternate inflation index run by economist John Williams, of ShadowStats.com, whose work is regularly cited by important publications such as *Barron's*, real price inflation is already running at more than 10% annually (as of August 2011).

If the Fed, at the behest of Washington, continues devaluing the currency, expect inflation to rise beyond 10%. When that happens, some people will rush to spend their money before it loses value. They will liquidate some hard assets and spend the cash, tipping money into an already-bloated money supply, bloating it further and pushing inflation higher still. The higher inflation will cause *more* panicked liquidation and tipping, and a further bloating of the money supply, in a self-reinforcing cycle.

Ask yourself: Did the billions of people who experienced hyperinflation first-hand throughout history see it coming? Each crisis was unique, but they shared one particular feature. Each crisis arrived like a thief in the night.

The crisis we are experiencing is a different—we can <u>see</u> it coming. We *know* the government is running up debt. We *know* the Fed is running the presses. We *know* the Baby Boomers have begun retiring, and will soon swamp the social security structure. We *know* the government's unfunded liabilities are unsustainable.

At the *Institute for Individual Investors*, our goal is to help investors protect their portfolio from any hypothetical path the economy *might* take. We believe the prospect of a savings-draining episode of hyperinflation is a lot more probable than most admit.

You may come to believe it as well once you learn ...

#### ... How the Government Distorts the Truth about Inflation

o government wants to admit to high inflation. It reflects poorly upon their performance. Rising prices usually indicate political and financial recklessness. Moreover, rising prices are something voters care deeply about.

So throughout history, governments have sought ways to mask inflation. The Romans reduced the amount of silver and gold in their coins. Even the U.S. decreased the amount of silver in its coins. (Prior to 1965, quarters were 90% silver. At today's silver price (near \$40 per ounce as of August 2011) the "melt-value" of a pre-1965 quarter is greater than \$7. That means that the government has forced into circulation coins worth 1/28<sup>th</sup> of what they once were.)

The consumer price index, or CPI, is the most widely used measure of inflation. In the U.S., it has undergone dramatic revisions and changes over the last few decades. The work of economist John Williams demonstrates this clearly. Mr. Williams does not calculate inflation the same way the Federal government does. Rather, he tracks inflation as it was calculated in 1980.

His alternate CPI measure shows annual U.S. inflation at 8-11%, in contrast to the government's official figure of as of July 2011.

Chris Thompson of East Bay Express, an Oakland-based weekly, sat down with Mr. Williams.

But over time and incrementally, government officials changed the methodology of measuring key economic indicators, painting an ever rosier picture of the economy, which just happened to benefit the incumbent politicians who ran the government. Or as [Mr. Williams] said in his calm, bland timbre, "Over time there has been a series of methodological shifts in the numbers to tend to create an upside bias in employment and downside in bias in inflation."

How does the government "paint an ever rosier picture" of the economy? By subtly changing what they measure. The technical term is "hedonic adjustment," but what it amounts to is "changing the rules." An important product improvement can provide the government with an opening to paint one of their rosy pictures.

For example, let's assume Apple's iPad2 is 50% faster than the iPad1. Let's also assume that the iPad2 costs a bit more. If the iPad2 were to be included in the CPI, the CPI would go up, wouldn't it? Yet with the current hedonic adjustment models that the government employs, a better product selling at a higher price actually brings the CPI down!

The government says, "Yes, the price is higher by 20%, but the computer is better by 50%. You're getting more than your paying for, which is *like* getting the same for less, so ... yeah, the price has fallen."

Also, there is one kind of CPI, which includes food and energy in its "basket" of goods and services it tracks, and then there's another, "Core CPI," which does not. Core CPI usually shows a lower inflation rate than does the CPI.

You might think it reasonable, when tracking inflation, to look at an index that tracks prices of food and fuel. But the government uses Core CPI to set monetary policy, and the media breathlessly reports the government's actions. End result: Inflation looks a lot lower than it truly is

To really see the impact of the government's "see no evil" approach to inflation, let's take ...

#### A Historical Detour into Hyperinflation in Weimar Germany

n the early 1920s, Germany had just suffered defeat at the hands of the Western allies in World War I, and was burdened with an enormous bill for reparations. Their manufacturing base had been decimated. An entire generation of working-age men had died in the war. The Weimar government was running large budget deficits.

Social programs, and public health care programs in particular, were becoming prohibitively expensive. Fundamental structural problems with the economy were ignored. What did the Weimar government do?

They printed money, of course. Germany exited the gold standard shortly after the end of WWI.

The following excerpt, from page 167 of J.K. Galbraith's *Money: Whence It Came, Where It's Going* captures the absurdities that came along with the Weimar hyperinflation.

Late in July the Daily Mail man told of this problem: It is difficult to get a cheque cashed. The 10,000-mark note is the highest denomination printed and the banks are denuded of them. This morning motor-lorries loaded with paper money kept on arriving at the Reichsbank but messengers with handcarts were also there to take away the bundles of notes passed out by the Bank. The cashier of my bank handed me 4,000,000 marks in 1000-mark notes, each worth less than half a farthing. He obligingly did them up for me in a neat paper parcel which I afterwards put on the table of the restaurant where I lunched and unpacked when the waiter brought the bill. But this difficulty will soon disappear for we expect to have 4,000,000-mark notes by the end of next week.

In the next weeks there were many such tales. At the end of October the New York Times told of a stranger in one of 'the lesser restaurants' in Berlin who flourished a dollar bill and asked for all the dinner it would buy. He was amply provided and, as he was about to leave, the waiter arrived with another plate of soup and another entree and bowed politely: 'The dollar has gone up again'."

Can something like that *really* happen in America? It's hard to be optimistic once you look below the surface of ...

#### The US Budget and the Government's Unfunded Liabilities

f troubled budgets really truly are an indication of inflation-to-come, we'd best look at where the world stands today.

Laurence J. Kotlikoff is a William Fairfield Warren Professor at Boston University, a Professor of Economics at Boston University, and a Fellow of the American Academy of Arts and Sciences. In an August 10, 2010 article in *Bloomberg.com*, titled "The U.S. is Bankrupt and We Don't Even Know It," he had this to say.

Based on the [Congressional Budget Office] data, I calculate a fiscal gap of \$202 trillion, which is more than 15 times the official debt. This gargantuan discrepancy between our "official" debt and our actual net indebtedness isn't surprising. It reflects what economists call the labeling problem. Congress has been very careful over the years to label most of its liabilities "unofficial" to keep them off the books and far in the future.

\$202 trillion is an almost unfathomable number. Yet this respected mainstream scholar says that this is the true size of America's unfunded liabilities.

Here's Dennis Cauchon, from a June 13, 2011 posting in *USA Today*.

The \$61.6 trillion in unfunded obligations amounts to \$528,000 per household. That's more than five times what Americans have borrowed for everything else — mortgages, car loans and other debt. It reflects the challenge as the number of retirees soars over the next 20 years and seniors try to collect on those spending promises.

"The (federal) debt only tells us what the government owes to the public. It doesn't take into account what's owed to seniors, veterans and retired employees," says accountant Sheila Weinberg, founder of the Institute for Truth in Accounting, a Chicago-based group that advocates better financial reporting. "Without accurate accounting, we can't make good decisions."

As an individual investor, there are a number of good decisions you can make. The first is to learn why ...

#### Silver and Gold Are Called "Precious" Metals

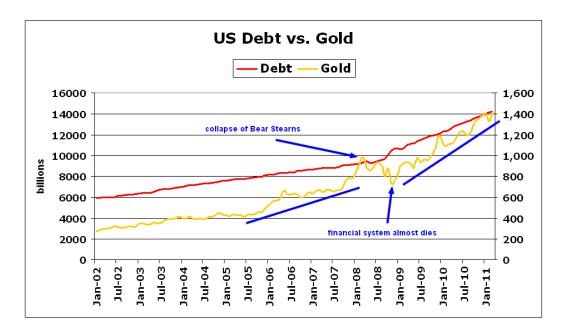
I do my best to publish information that is free of political and Wall Street hype, and that information happens to suggest strongly that anyone living in a dollar-denominated world would do well to own some physical gold. — John Williams, economist, May, 2010

f you've thought about buying gold, or silver, but are hesitant—you're not alone. Investors rarely time their purchases perfectly, and with gold and silver having sky rocketed, perhaps you wonder if it's too late. In fact, you may have come to this report not a moment too soon.

The important point is this: if you accept the argument summarized in this *Hyperinflation Survival Guide*, that the government borrows too much, spends too much, prints too much money, and has no strong incentive to change its ways, than, no, it's probably not too late to take action right now to protect yourself.

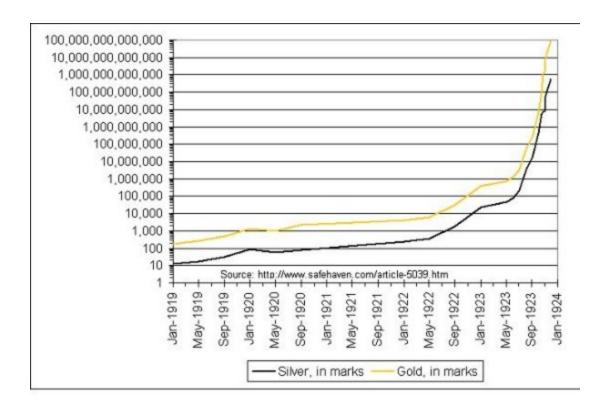
Gold and silver will probably continue to rise so long as a status quo monetary policy and a kick-the-can politics remain in place.

Examine this chart showing the relation between U.S. debt and the price of gold. Needless to say, the two are *highly correlated*.



Source: http://dollardeathspiral.blogspot.com/2011/03/us-debt-vs-gold-price-linear-regression.html

This chart shows the performance of gold and silver in German marks during the Weimar hyperinflation:



And for those who prefer tables to graphs:

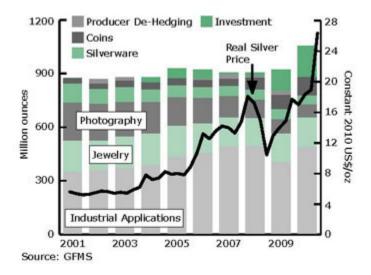
Date:	German Marks needed to buy one ounce of gold
Sept 1919 Jan 1920 Sept 1920 Jan 1921 Jan 1922 Jan 1923 Sept 1923 Oct 2, 1923 Oct 16, 1923 Oct 23, 1923 Oct 30, 1923 Nov 5, 1923	

The historical data demonstrates why physical gold is one of the best ways to protect wealth and preserve purchasing power during periods of large-scale inflation.

And not just gold.

#### Your Future Should Also Have a Silver Lining

Recently, silver has re-emerged as an excellent inflationary-hedge investment. In fact, in recent years, sales of silver coins have surged. Three shades of green are shown in the chart below—for Jewelry, for Silverware and for Investment. Note that the darkest green (Investment) does not even appear on the chart until 2004.



Silver has outperformed gold in recent years, increasing in value 300% to gold's 100%. And many think the trend will continue. Throughout history the price of gold has averaged about 16x that of silver. Today, gold is around 40x higher than silver.

If the gold/silver ratio, as it is known, returns to that historical 16x level, silver prices will soar.

It bears repeating—when it comes to profitable investing in an inflationary age, forewarned is definitely forearmed. So ...

#### Choose Your Weapon—Bullion, ETFs, Mining Stocks ...

Investors debate the best way to invest in precious metals. Some prefer owning the stocks of companies that mine gold, rather than own the metal itself. While mining stocks are a good option for many investors, they require a little more discipline and research to profit from.

There are plenty of good mutual funds with experienced managers out there. At the bottom of this report you'll find a link to a list of top-performing mutual funds in the precious metal category.

Some would rather own coins or bars, which are an excellent way for individual investors to gain exposure to precious metals. They can be purchased online, shipped, or stored on your behalf. Coins are especially attractive for obvious reasons. They are a store of "portable wealth." A coin containing actual silver will always make for sound money.

If you choose to have your bullion stored remotely, be sure to read the fine print. Some accounts are "pooled", meaning you may not physically own anything. There is a small, but significant, credit risk in these accounts.

And remember, when buying physical precious metals, be sure to shop around for the lowest "over spot" price. The amount over spot is the "premium" dealers add onto what they paid the mint. Check with your local coin and gold dealers. Ask them what their price "over spot" is. Then compare with prices you find on the web.

Now that you've acquired some precious metals,

#### When Should you sell your gold or silver?

Most investors would trade all their gold and silver for a single piece of crystal, provided it was a crystal ball. Knowing when to sell is one of the hardest things for individual investors to decide.

In America, the answer largely depends on the Federal Reserve, and when its so-called "easy money" policies come to end. As long as interest rates remain low, and the Fed continues to print money, the uptrend in precious metals will almost certainly continue, and silver will prove to be no exception.

The fundamental problems fueling the apparent "need" for such drastic monetary action aren't getting any better. In fact, they're getting worse. So Federal Reserve policy is unlikely to change any time soon. If anything, it seems likely to get even more extreme as time goes on.

As more dollars are printed, their appeal as a store of wealth naturally declines. Gold, silver, and other hard assets cannot be printed. Their scarcity and long history means they will likely remain attractive.

Apart from watching the Fed, another approach is to sell your metals when you can roll the proceeds into something of greater value, or at a discount price. Currently, there is a real shortage of good alternative investments. Bond yields are low, or even negative, once you factor inflation in. Eventually, this will change.

It is always wise to know well ahead of time what you plan to shift into, be it stocks, land and real estate, bonds or anything else. Timing the sale *perfectly* in such tumultuous times is impossible. However, investors will want to look for certain signals.

Is Washington seriously cutting the federal budget, and not just grandstanding the issue? Is the Fed facing greater real pressure to tighten monetary policy? Real pressure is pressure from legislative coalitions that have real power.

These will be key factors in timing the sale of precious metals. It will likely be a few more years 2 to 5 years perhaps, before we see these signals.

Here are some ...

#### Final Thoughts—TIPS No, Foreign Bonds Yes

TIPS (Treasury Inflation-Protected Securities) are bonds designed to beat inflation. The U.S. has been offering them to citizens since 1997, and governments around the world do too. The yield on TIPS rises as inflation increases. Unfortunately, these increases are tied to **official** CPI. And as you saw above, the official CPI is notorious for understating real consumer price inflation. So TIPS were a great concept with a flawed execution.

Owning international bonds is one way to protect your portfolio's purchasing power, even grow it. Bonds of foreign governments with a sound(er) monetary policy may be an attractive option, as are those issued by corporations. Both are widely held by top world bond funds.

American investors especially can find higher yields outside U.S. borders.

In addition to providing a higher income, foreign bonds offer the individual investor easy currency diversification, because foreign bonds are priced in local currencies. For an investor in the U.S., for example, simply owning these securities protects against a falling dollar.

And finally, no individual investor should begin the day without reading through the *Tycoon Report*. Watch your inbox for updates and special features. As always, the *Institute for Individual Investors* values your patronage.

Why not pay us a visit? Look around at the different courses and services we provide. I'm willing to bet you will find something that fits your financial and retirement goals like a golden glove.

Thank you for reading.

Sincerely,

Adam P. Sharp Senior Director of Research The Institute for Individual Investors

## **APPENDIX A: The Joneses Lose Their Savings**

We'll begin with some simple assumptions.

These numbers are chosen merely to illustrate the effects of hyperinflation— obviously some retired couples receive more each year, and some couples receive less.

Mr. and Mrs. Jones are a 62 year old couple, and they are retiring this year, which we'll call Year 1.

They will receive \$30,000 each year from Social Security and an additional \$30,000 from a pension or 401(k).

They also have a portfolio, or savings, worth \$500,000, which yields 5% annually, or \$25,000.

So the Joneses pre-tax income each year is \$30,000 + \$30,000 + \$25,000 = \$85,000.

Assume that 20% goes to taxes. Again, this is just for illustrative purposes.

Assume they consume their entire income, which for Americans is a plausible assumption.

Finally, and most significantly, we'll assume a 17% annual rate of inflation.

							After Tax	
	Pension and	Yield on	Total Pre-tax		<b>Total After-</b>		Income Minus	
Year	401(k)	Savings	Income	Taxes	Tax Income	Expenses	Expenses	Savings
1	\$60,000	\$25,000	\$85,000	\$17,000	\$68,000	\$68,000	\$0	\$500,000
2	\$60,000	\$25,000	\$85,000	\$17,000	\$68,000	\$79,560	-\$11,560	\$488,440
3	\$60,000	\$24,422	\$84,422	\$16,884	\$67,538	\$93,085	-\$25,547	\$462,893
4	\$60,000	\$23,145	\$83,145	\$16,629	\$66,516	\$108,910	-\$42,394	\$420,499
5	\$60,000	\$21,025	\$81,025	\$16,205	\$64,820	\$127,424	-\$62,604	\$357,895
6	\$60,000	\$17,895	\$77,895	\$15,579	\$62,316	\$149,086	-\$86,770	\$271,124
7	\$60,000	\$13,556	\$73,556	\$14,711	\$58,855	\$174,431	-\$115,576	\$155,548
8	\$60,000	\$7,777	\$67,777	\$13,555	\$54,222	\$204,084	-\$149,862	\$5,686
9	\$60,000	\$284	\$60,284	\$12,057	\$48,227	\$238,779	-\$190,552	<b>\$0</b>
10	\$60,000	\$0	\$60,000	\$12,000	\$48,000	\$279,371	-\$231,371	<b>\$0</b>

The Joneses savings is gone early in Year 9. So it only took a little more than 8 years for their savings to vanish.

### APPENDIX B: Sources and Additional Information

Those who would like to learn more about hyperinflation from a historical perspective <u>will find Wikipedia's many pages on that subject very useful.</u>

You can read some free selections from Peter Bernholz's book on Google Books.

No individual investor should be without Investopedia.

J.K. Galbraith's *Money: Whence it Came, Where It Went* is an entertaining and wide-ranging work. You can read excerpts for free here.

Read more about Hyperinflation in Weimar Germany here.

US News & World Report has a fine piece on the best World Bond Funds

And here's more about World Bond Funds, this one from Yahoo Finance.

Here's an article on the US government's debt.

Daniel Wagner's Associated Press article is here.

If you are interested in reading more about the United States' "Money Supply," <u>you'll find some</u> information here.

Here's a look at the unequal societal effects of inflation.

You'll find an eye-opening look at "alternative" inflation charts here.

Here's an "Inflation Calculator."

You'll find information about American's Life Expectancy here.

Peter Bernholz's piece from *The American* can be found here.

Bloomberg.com has a frightening article on US debt.

Can the government use inflation to escape the debt crisis?

Did you know that *The Economist* has their CPI?

You better believe the current German government hasn't forgotten hyperinflation.

Here's a Special Report called "Why Silver Will Always Beat Gold."

Read John Williams' lengthy report on US hyperinflation here.

Here *The Economist* has more on US debt.

This "Debt Clock" lets you watch the government borrowing in real time.

John Williams is a fascinating figure, as you'll learn here.

Academically-inclined readers will find an interesting take on Hungarian hyperinflation here.

The Economist again—this time on "inflating away" debt.

And finally, go here to calculate the "melt value" of your coins.