

# The World Is Now Hurling into Weimar-Style Hyperinflation

by Richard Freeman

Concerted action by Federal Reserve Board Chairman Alan Greenspan, in conjunction with U.S. Treasury Secretary Lawrence Summers, to print large volumes of money to bail out the world financial system's mountain of worthless financial assets, has caught the world in a global hyperinflationary spiral. This spiral is governed by the identical underlying principle, and will soon have the same devastating effect, as the hyperinflation which ravaged Weimar Germany starting in 1922, and reached gale force from March through November 1923.

This is cause for alarm, but most alarming is the silence of world leaders, especially U.S. President Bill Clinton, in response to this crisis. The sole exception is Democratic Presidential pre-candidate Lyndon LaRouche.

Since August-September 1998, Greenspan has injected liquidity into the financial system, both through the Federal Reserve's federal funds window and by minting new dollar bills, on a prodigious scale. During August-September 1998, the world financial system crossed a boundary condition, and so, accordingly, did Greenspan's wild-eyed, no-holds-barred running of the printing presses.

## Bailouts, and More Bailouts

On Aug. 17, 1998, when the world was already overburdened by \$300 trillion in short-term, unpayable obligations, the Russian government announced a 90-day suspension of payments on GKO short-term Treasury bills, and on categories of Russian corporate and bank debt. The world's biggest banks and hedge funds had been heavily speculating in the GKO's, which promised upwards of 90% rates of return. Within weeks, large financial institutions, from Bank of America to Salomon Brothers to J.P. Morgan, were reporting official losses in the Russian market of \$100-400 million apiece. Indications were that many losses went unreported.

For reasons in part related to the Russian crisis, on Sept. 23, 1998, the Long-Term Capital Management hedge fund, with its Nobel Prize-winning Black-Scholes formula, collapsed, and was bailed out. LTCM had \$1.25 trillion in derivatives contracts, and had borrowed at least \$120 billion from the world's leading banks to invest in those derivative positions, which had now gone bad. Between the Russian debt suspension and the LTCM blowout, the world faced a sys-

temic financial meltdown. Greenspan took his dollar printing and liquidity injections to another level, and he has continued that policy ever since, including during the week of April 10-14 of this year, when the Nasdaq stock market plunged 25%. Greenspan and Summers, through their roles in the President's Working Group on Financial Markets (known as the "Plunge Protection Team"), coordinated pumping in large sums to hold up the stock market.

The general form that Greenspan's dangerous actions take is captured by LaRouche's Triple Curve, or "A Typical Collapse Function" (**Figure 1**). The graph is a heuristic diagram, in which the upper curve represents the financial aggregates, the mass of speculative paper financial instruments and property titles, which have grown at an hyperbolic rate. The middle curve represents the monetary aggregates, principally the money supply, which Greenspan has increased at an accelerating rate *to prevent a deflationary chain-reaction collapse of the financial aggregates bubble*, including stocks and derivatives. The lower curve represents the real, physical economy, which over years has been contracted by the burgeoning

FIGURE 1

## A Typical Collapse Function

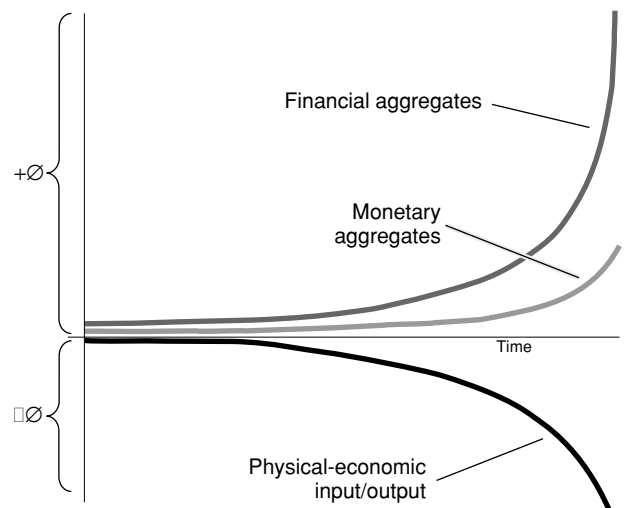
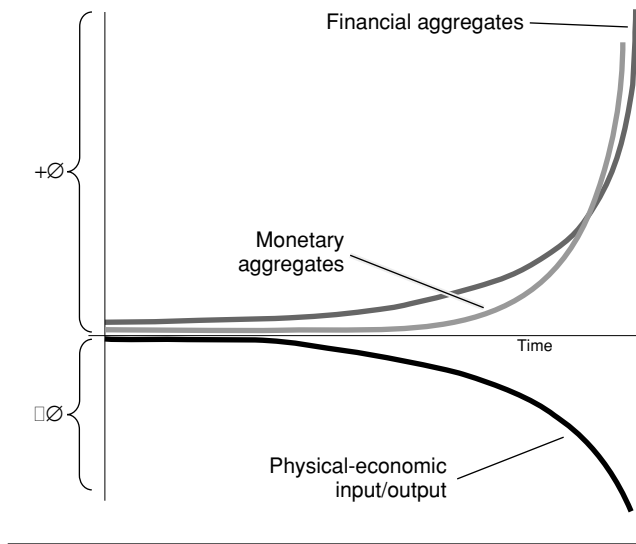


FIGURE 2

## The Collapse Reaches a Critical Point of Instability



financial claims of the upper two curves.

However, this highly unstable condition could not long remain. In the 20 months since August-September 1998, Greenspan and Summers have so pumped up the monetary aggregates, that they have crossed a boundary condition, where “the rate of monetary expansion rises more rapidly than the rate of financial expansion,” as LaRouche presented this in his paper “Regional Organization Under a New Bretton Woods” (*EIR*, June 9, 2000). This is a singularity of truly groundbreaking importance, representing the process of generation of a hyperinflation (**Figure 2**). As will be seen, this process is governed by a Riemann shock front.

While President Clinton has stubbornly denied reality, and prattled about the wonders of the disastrous “New Economy,” the emergence of this hyperinflation is already evident in trends in raw-materials and real-estate prices, and has become the governing reality of the world economy. Though Greenspan would deny it, his money-pumping has created a hyperinflationary spiral that will be every bit as, or more destructive than what befell Weimar Germany.

We now look at a study of Weimar Germany to demonstrate how this process unfolded.

### Weimar Reparations

At the April-May 1919 peace conference at the Versailles palace, outside of Paris, France, terms were imposed, drawn up by Britain and the City of London-Wall Street oligarchical financiers, that created the conditions which generated the Weimar hyperinflation. They enforced reparations designed to rip apart Germany.

The reparations had two prongs, which were imposed in

two stages. First, physical economy capacities were taken away from Germany. The nation was stripped of 13.5% of its land, 10% of its population, 15% of its arable land, 12% of its livestock, 15.7% of its coal, 48% of its iron ore, 63% of its zinc ore, 24% of its lead mines, and 42% of its smelting steel capacity—at least 16% of its entire physical capacity was taken away.

As well, Germany had to give away 90% of its merchant marine fleet, with 5 million tons of gross weight displacement. Germany’s railroads—10,000 locomotives, 225,000 freight cars, 8,000 passenger cars—were taken out of the country.

This plan was instituted to pulverize Germany’s economy, and the bottom curve of the Triple Curve function was forcibly contracted.

The second prong came on May 5, 1921, at the London reparations conference, where it was announced that on top of the physical reparations, there would also be financial reparations. The financial reparations, which had been discussed at Versailles, were now finalized at a staggering 132 billion golden marks, and a payment schedule was laid down. The demand for reparations now fuelled the growth of financial aggregates curve, the upper curve of the Triple Curve function.

Thus, the lower curve of the Triple Curve function had been collapsed downward, and the upper curve was sent upward at a hyperbolic rate of growth. Thus, the disastrous condition that exists in many parts of the world today, was imposed on Germany by treaty.

The conditions of the reparations were destructive. There were two ways that Germany could attempt to meet the payments: first, increase exports over imports, and use the foreign exchange earnings to pay off the debt (which, because of the conditions imposed on the economy, was not possible); and second, increase taxes. In 1922, heavy new taxes were imposed, but these were being imposed on a physical economy which had been forcibly contracted, and on a population that had suffered five years of war, and whose living standards were falling.

The reparations payments schedule could not be met, and so, the printing presses were turned on. From the May 1921 London reparations conference, but especially from late 1922 onward, the growth of monetary aggregates was increased at dramatically higher rates.

Indeed, this tendency was further intensified when, in January 1923, French and Belgian troops, egged on by the British, occupied the Rhur to collect on reparations, further looting German industrial capacity.

### Monetary Aggregates Expansion

**Table 1** and **Figure 3** show the monetary aggregates, or in other words, the German paper marks in circulation. We look at their explosive growth, first, relative to the financial aggregates, and second, relative to themselves.

To compare the monetary aggregates to the financial ag-

TABLE 1

## Weimar Hyperinflation: Total Issue of Paper Currency, June 1922-November 1923

(billions of marks)

1922	
June	180
July	203
August	252
September	332
October	485
November	770
December	1,295
1923	
January	2,000
February	3,536
March	5,543
April	6,581
May	8,610
June	17,341
July	43,814
August	668,703
September	28,244,406
October	2,504,995,700
November	400,338,326,400

gregates, we must first determine the size of the financial aggregates by approximation, since no single figure, or figures, exist.

We look at the principal elements of the financial aggregates in 1922:

First, there is the reparations debt, which was imposed at Versailles to destroy Germany, which was 132 billion golden marks;

Second, there is the debt of the German government outstanding, apart from the reparations debt, which was approximately 95 billion golden marks;

Third, there is the German corporate and household indebtedness, estimated at roughly 110 billion golden marks;

Fourth, there is the the German stock market, whose value is estimated at roughly 45 billion golden marks.

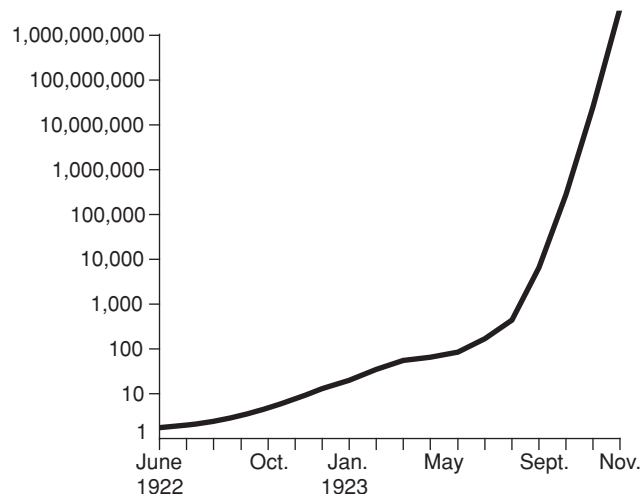
Taking these four, the most significant elements of the financial aggregates, as a whole, in 1922 they totalled 382 billion golden marks.

Now, let us compare the financial aggregates to the monetary aggregates.

During June-September 1922, the monetary aggregates nearly doubled, rising from 180 billion to 332 billion marks. This reflects the fact that the monetary expansion, while it would explode during March-November 1923, was already

FIGURE 3

## Paper Currency Rose Astronomically in Weimar Hyperinflation, June 1922-November 1923



seriously under way during late 1922. Then, during October 1922, the monetary aggregates increased almost 50% in one month, rising to 485 billion marks — compared to the financial aggregates of roughly 382 billion marks.

This presents an extraordinary picture. The monetary aggregates, which had been increased to prevent a catastrophic fall in the financial aggregates, had now taken on a life of their own, and became greater than the financial aggregates. *In Weimar Germany, it is not just that the rate of growth of the monetary aggregates zoomed above the financial aggregates, but the absolute amount of the monetary aggregates zoomed above the financial aggregates.* This happened principally because of the attempt to pay the insane reparations payments. So, the monetary aggregates were expanded to support the financial aggregates, but became much bigger than the instruments they are supposed to support.

But, the second part of this process was even more turbulent.

We look at the rate of increase of the monetary aggregates. During 1922, the monetary aggregates increased by one order of magnitude. To situate the importance of this: Based on U.S. figures, monetary aggregates normally increase by one order of magnitude over 20-30 years. In Weimar Germany, monetary aggregates grew by one order of magnitude in 1922 alone.

In June 1923, the monetary aggregates grew to 17.34 trillion marks, up from 8.61 trillion marks in May. During June 1923, the monetary aggregates had grown by one order of magnitude. Then, between July and August, the monetary aggregates grew from 43.8 trillion to 668.7 trillion marks,

another order of magnitude. During September, they grew by another two orders of magnitude; during October, they grew by another two orders of magnitude; and during November, they grew by another two orders of magnitude, ending November at 400 quintillion paper marks. This is like a series of hyperbolic horns, each growing out of its predecessor. During June–November, the monetary aggregates grew by eight orders of magnitude, with most of that increase—seven orders of magnitude—occurring in only four months. As we said, this compares to a relatively normal growth of the monetary aggregates of one order of magnitude every 20 to 30 years. During March–November 1923, the German currency in circulation had grown 100 million times—an astronomical rate.

### The Next Step

The question remains: What characterized the relationship of the monetary aggregates to the financial aggregates during 1923, after they had surpassed the level of the financial aggregates in 1922? It is difficult to estimate the financial aggregates for 1923, because of the difficulty in determining one of its four principal elements: the level of government debt outstanding. In 1923, compared to all earlier years, the size of the German government debt outstanding (the result of newly incurred government deficits, which were not covered by taxes, but resulted in new government debt issues), became enormous. But, rough estimates yield a picture which completely confirms LaRouche’s conception.

From 1919 forward, the German government financed its operations, primarily not by issuing longer-term notes and bonds, but by issuing very short-term “discounted treasury bills.” Taxes were collected to pay them down, but whatever were not paid were added to the outstanding debt at the end of the year.

But, during 1923, relatively very little tax revenue was collected, compared to an exponential level of discounted treasury bills that were issued. As a result, the German government debt outstanding was growing by a very large sum every month. At the start of 1923, the unfunded German government debt was growing by several hundred billion marks each month, and by mid-year, the unfunded German government debt was growing by tens of trillions of marks each month.

This set the tone for one of the key elements that was different in 1923. When the government debt—one of the leading elements of the financial aggregates—steeply expanded each month, the financial aggregates in turn expanded much more than in any previous year.

The characteristic action that took over in 1923, is that both the monetary and the financial aggregates grew at hyperbolic rates. The monetary aggregates aggravated the growing instability, and undermined the monetary and financial order. They could not be slowed, and had shed entirely their character of supporting the financial aggregates.

Thus, there were two inter-linked phases in this develop-

TABLE 2

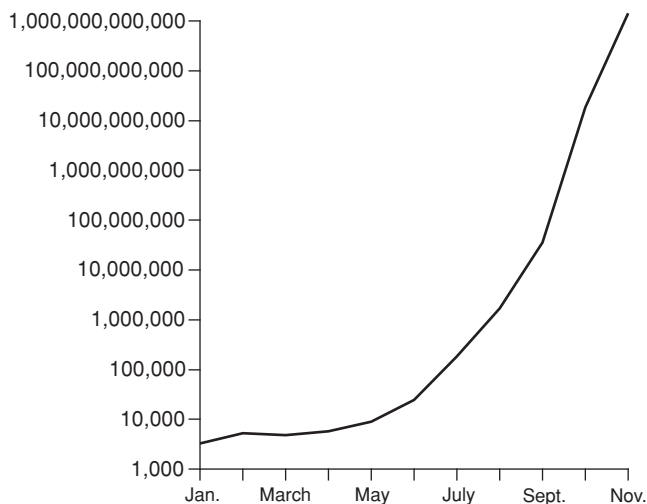
### Weimar Hyperinflation in 1923: Wholesale Prices (1913 = 1)

January	3,286
February	5,257
March	4,827
April	5,738
May	9,034
June	24,618
July	183,510
August	1,695,109
September	36,223,771
October	18,700,000,000
November	1,422,900,000,000

FIGURE 4

### Weimar Hyperinflation in 1923: Wholesale Prices (1913 = 1)

(logarithmic scale)



ment. During 1922, the monetary aggregates, which had been expanded to support the financial aggregates, became bigger than the instruments they were supposed to support. During 1923, the expansion of monetary aggregates shifted higher still, to a hyperbolic rate of growth, which brought down the German financial system.

### Price Explosion

There was now a great increase in prices (Table 2 and Figure 4), resembling the growth of monetary aggregates,

Table 1 and Figure 3. Prices grew by one order of magnitude during June 1923, one order of magnitude during July, one order of magnitude during August, and one order of magnitude during September. During October, prices grew by three orders of magnitude, and then by another two orders of magnitude during November. During March–November 1923, prices grew by nine orders of magnitude. Prices in November were 1 billion times the price levels in March.

The unprecedented increase in prices must be sought elsewhere than the common explanation given for inflation. The reader must be free of the false hereditary principles of “action at a distance” and strict “pairwise interaction.”

In his paper “New Accounting Practices Are Imperative: The Becoming Death of Systems Analysis” (*EIR*, March 31, 2000), Lyndon LaRouche says: “The crude notion of ‘action at a distance,’ as attributable to Galileo, typifies the axiomatic incompetence of the employment of common statistical methods in financial accounting and related practice. It is the intrinsic absurdity of that assumption of ‘action at a distance,’ which is the kernel of our treatment of the issue of ‘non-linearity.’ ”

The common conception of supply-and-demand involves just such action at a distance. Under this false idea, if something is in short supply, its price goes up, and if it is too abundant, its price falls. Another conception is that the price of a car, for example, is the sum of the prices of steel, rubber, glass, tin, etc. If the price of the steel, rubber, etc. rise by 5%, then the price of a car will rise by 5%. While this idea starts from a real process of production, it incorrectly assumes that price is strictly the costs at the point of production. It does not account for the collapsed state of infrastructure, the lack of scientific development and of the cognitive development of the mind of the labor force, the burgeoning insurance and finance costs—resulting from merger and acquisition indebtedness, such as junk bonds, or the spiralling growth of derivatives et al., all of which add on to the final price of all goods.

### **A Riemannian Shock Front**

But all of these standard conceptions—whether they have limited or, mostly, no validity—break down completely in explaining a hyperinflation. One must reject them, and start from reality: The monetary aggregates are wildly pumped up to circulate the mass of speculative financial aggregates, which have been growing hyperbolically. Both the monetary and financial aggregates suck dry the physical economy, upon which human existence and the financial aggregates depend. In the attempt to keep this process going, to prevent the financial bubble from collapsing, it reaches a boundary condition, in which a shock front of self-aggravating instability is generated, which drives forward the hyperinflation.

The shock front operates according to non-linear laws, comparable in the domain of mathematical physics, to the Riemannian shock wave front (see “On the Propagation of

Plane Air Waves of Finite Magnitude,” *Bernhard Riemanns gesammelte Mathematische Werke*, H. Weber, ed. [New York: Dover Publications reprint, 1953]). The shock front operates such as the transsonic front when a plane exceeds the sound barrier.

The shock front is the highest governing force, determining everything else that happens in the economy, including prices. It renders ridiculous all other explanations. For example, in Weimar Germany, could one explain that it was a shortage of wheat that caused the price of bread to rise? Nonsense, supply and demand figured not at all into the price of bread. Or, was it that the price of wheat had risen 10%, the price of grinding grain had risen 25%, and the price of salt had increased 20%, and this increased the price of bread? No, the price of bread was increasing at the rate of 100 to 10,000 times per month.

Under current conditions, all “normal” conceptions of inflation fail. Unless one can conceptualize the Riemann shock front, unleashed by the forces that LaRouche has described from the standpoint of the transformation of the Triple Curve, the nature of the crisis cannot be grasped. It is this shock front which determines prices from the top down, not the cost of wheat and of grinding the wheat, or supply and demand acting in pair-wise interaction, which determines prices from the bottom up.

For previews and  
information on  
LaRouche publications:

## **Visit EIR's Internet Website!**

- Highlights of current issues of EIR
- Pieces by Lyndon LaRouche
- Every week: transcript and audio of the latest **EIR Talks** radio interview.

<http://www.larouchepub.com>

e-mail: [larouche@larouchepub.com](mailto:larouche@larouchepub.com)