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INFLATION?

BY
IRVING FISHER, LL.D.

Professor of Economics, Yale University

ASSISTED BY
HERBERT W. FISHER

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“Shall I count them pure with the wicked
balances, and the bag of deceitful weights?”

MICAH

FOREWORD

This book is offered to the public in the hope that it may help to crystalize some of the ideas which now seem to be clashing and forming in the public mind—ideas about money and the present crisis. On these ideas, in my opinion, recovery—a reasonably prompt recovery, as well as escape from worse ills—absolutely depends.

I am indebted to Professors George F. Warren and Frank A. Pearson and to their publisher, John Wiley & Sons, for permission to reproduce in Chapter II a number of the graphs first printed in their admirable and comprehensive book on *Prices* (1933). For permission to print the three charts of Chapter V, which I contributed to *Stabilization of Employment*, I am indebted to the American Association for the Advancement of Science, and to the Principia Press.

I am also indebted to my brother, Herbert W. Fisher, for taking the materials which I put into his hands and, under my direction, welding and fashioning them into this book.

IRVING FISHER

New Haven, Conn.
May, 1933

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CHAPTER I

SOUND MONEY

THE INFLATION PICTURE

A MOVEMENT for monetary inflation is once more showing its head in the land. But it has met with a quick and furious response from the defenders of "sound money"; and already its head is bloody—though unbowed.

Inflation is an old idea. The French government in the days of the French Revolution authorized vast issues of paper money, thinking, apparently, that to double the paper of France would double the wealth of France, though the lands, livestock, minerals and human hands and brains were left just the same as before. There was little opposition to this unsound measure, for the simple reason that, in those days, practically no one possessed such an idea as sound or unsound in connection with money.

Nevertheless, "Nature" possessed the idea. Nature knew already what economists have since learned; and Nature, in the days of the French Revolution as in all her other days, proceeded to work out and to inflict on her human subjects the inevitable consequences of such "get-rich-quick" maneuvers. Those consequences were economic misery.

The Germans, too, after the World War (along with many of their European neighbors) tried inflation, though

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from a somewhat less primitive motive. A millstone of debt had been tied about the neck of the German government; and that government was trying to float itself on tides of paper. There is nothing but its own will to prevent a government from paying off the domestic part of its debt with paper fresh from the printing press; and, in fact, inflation for that purpose brings temporary relief. Nevertheless, once started, it is increasingly difficult to stop; and substantially the same consequences which Nature, a hundred years before, had inflicted on France she now proceeded to inflict on Germany in 1918-23—except one: During the French Revolution, heads were not only bloody, they were cut off. For “after the paper money machine comes the guillotine”—such was one of the aphorisms of that day.

The fact is, however, that the Germans suffered a worse evil than guillotines. They called the name of the evil the “Calamity Boom.” For by 1920, their price level had been boomed up to fifteen times its war-time height. Fifteen times? By 1923, it was a trillion times! This was the inflation peak of all history, far out-topping even that of the French Revolution.

What did a cost of living, up a trillion-fold, do to the German breadwinner? Of course, the plain workman went on living, for his wages rose on the same tide; not a trillion-fold, to be sure, but enough billion-folds to buy him a subsistence at trillion-fold prices. But it was a race between his wages and the German price level; and the price level always had the advantage, for it always started first—so much so that the workman was miserable even if not quite starved.

But the German middle class was practically starved; the

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sturdy, sedate, high-minded middle class—the spiritual backbone of the country. In large numbers it was simply wiped out; that is, its members were forced to forget culture in order to keep afloat economically on the tide of wages; to become ditch diggers, miners, artisans—or die; and many died: by illness; by starvation or near-starvation; and by suicide, the older folk sometimes taking their lives in order to relieve the strain on the younger folk on whom they had grown dependent. Like middle classes the world over, the middle class of Germany had tied itself to such forms of income as had no facilities for racing—no legs to keep up with the wild inflation. The typical income of the cautious, fairly well-to-do middle class consisted largely of the coupons of bonds; that is, of interest—a form of income that is stationary by its own terms—stationary by contract. Five per cent on a million marks is once and forever fifty thousand marks; and when prices are up a trillion-fold, the whole principal of a million marks is less, as to buying power, than the normal price of a postage stamp—and five per cent of it is microscopic.

Not only the bonds of the government but the bonds of private enterprise were paid with the same inflated paper; so that, while a business company with one hand gathered in the paper marks by trillions, with the other it paid out worthless hundreds to its bondholders and creditors. A certain well-known Berlin professor before the war had made a fortune out of his books—a fortune as college professors measure fortunes. Moreover, his books were a benefit to mankind. But he had put his modest fortune into gilt-edge German bonds, and he came out in 1923 with less than the value of a postage stamp!

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And in Austria and Hungary it was much the same. In Budapest, Professor James Harvey Rogers of Yale visited a genteel poorhouse which had been established by a benevolent woman. He was taken to a shabby room where he was told there lived two ex-judges. They had been judges, moreover, of what, in Austria, corresponds to the Supreme Court of the United States.

THE DEFLATION PICTURE

But the greatest inflation in all history need not be more humiliating than the greatest deflation in all history.

The greatest *inflation* was Germany's in 1923; the greatest *deflation* is America's in 1933.

To be sure, the inflation was a trillion-fold, and the deflation is only (thus far) 43 per cent, counting from 1929 (67 per cent if we count from 1920). But 43 per cent downward is almost as devastating in its practical effects as a trillion-fold upward. When prices have dropped 43 per cent in three years, business men and farmers are almost as hard hit as was Germany's middle class.

It takes a good deal to goad an American farmer into anything that savors of radicalism. Even in Russia, the all-powerful communists have never been able to gather the farmers into their fold. As for America's farmers in the Middle West, they are described by Mr. Bruce Bliven, from personal observation,¹ as "steeped in our tradition acquired in little white school houses . . . ; they read the Des Moines Register and the Chicago Tribune."

Accordingly, in 1931, the farmers held their meetings in church basements, bringing their wives and a basket supper,

¹ *New Republic*, August 31, 1932.

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to speculate about their depression troubles—"patient, polite and undecided." But "if the editors of the New Republic," says Mr. Bliven, "barricaded themselves in West 21st Street and began throwing tear gas bombs at the Italian organ grinder, they would feel no more shame-faced than these sons of Iowa must have felt" in August, 1932.

Here let us turn to the newspapers of Madison, Milwaukee, Des Moines, Sioux City, and Sioux Falls, and to an article in the Wisconsin Agriculturist and Farmer for August and September, 1932. In these journals are found such terms as "war," "sector," "front," "blockade." For, in August, 1932, not content with trying to raise the price of milk by sabotage (throwing it down the sewer or feeding it to hogs) several of the farm organizations of the Middle West were trying—partly by way of a milk strike and partly by way of what they called a Farm Holiday—to starve the towns into paying higher prices for farm products generally. They planned to let through enough milk for the towns' babies; and there was no lack of good American laughter when they stopped a truck and found that the only cargo was eight healthy children belonging to the driver. But picketing led to force, and a number of failures led to strategy. In one town the distributors boasted that, despite the blockade of the country roads, supplies were coming in by train from neighboring states; but soon the farmers were stopping the goods at the railway stations too, and the revolt eventually spread from one state to another.

The sheriffs were drawn into it. They had to swear in extra deputies, and found many workless men eager for the job. Sometimes, therefore, the trucks were successfully conveyed; but sometimes the deputies were routed—500 farmers

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against 100 deputies. A few heads were broken, a few farmers jailed and then released on bond (in time to avert a "pitched battle" says the Des Moines Register). And at last, in Cherokee County, Iowa, fourteen farmers were actually shot.²

In an editorial, the Sioux Star took the position that, though breach of the law was unfortunate, yet the gravity of the farmers' plight was not understood and had to be dramatized; and the editor even compared these embattled farmers with those who fought at Concord and Lexington.

The governors or other representatives of several states—Minnesota, Wisconsin, North Dakota, Oklahoma, Nebraska—held a conference with the farm leaders, who asked for a four-year moratorium on federal seed and feed loans, a two-year moratorium on mortgage debts, and asked further that the governors try to get the national Congress to reflate the hole in the currency. In Madison, Wisconsin, the University opened its halls for a conference between the Milk Pool and the Wisconsin governor, where the word "truce" was used, and a truce was agreed upon—all with decorum and good nature, but also with a somewhat confident prediction by the leader that if, during the truce, Congress should fail them, the farmers would make the food blockade practically nation-wide—some said, with the reinforcement of organized labor.

It hardly seems plausible that farmers can go hungry; but not all farmers raise everything that the human body requires, and hunger is an actual threat to some of them.³

² Whether killed does not appear. (*The Register*, Des Moines, Iowa, September 1, 1932.)

³ *New York Times*, February 13, 1933.

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Nevertheless, it is not to be supposed that, in the present juncture, the farmers are striking merely for higher income. They are fighting chiefly to save their farms. The farms are mortgaged, and the interest must be paid from income, and the income must come from the sale of milk and other produce. Meanwhile, the mortgages are being foreclosed; and here, perhaps, the methods of this smoldering revolt, though less organized, are more violent. Bidders have been knocked on the head; a noose was shown to one creditor (or his representative)—a noose hanging from a beam in the barn; and the farm was sold for a song—back to its original owner.⁴

The "front" is now relatively quiet, largely, it would seem, in order to give Mr. Roosevelt and the new Congress a chance to do something remedial. But already, before the end of Mr. Roosevelt's first month in office, the revolt threatens to revive in the West,⁵ and even to include a state as far east as New York. In March, near Rochester, there was a milk strike which involved a physical clash between farmers and the New York state troopers.⁶ In the same month, in North Dakota, the militia were called out—this time, however, not against the farmers but on their behalf; for the Governor of North Dakota had, by proclamation, forbidden the sheriffs to conduct mortgage sales, and the sheriffs had apparently preferred to take orders from the courts; so the state militia went out against the sheriffs. Perhaps deflation has at last produced a war between the executive and the judicial branches of govern-

⁴ *New York Times*, February 13, 1933.

⁵ *Chicago Tribune*, March 13 and 14, 1933.

⁶ *New York Times*, April 1, 1933.

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ment.⁷ However, the press carries a more reassuring item from New York where the State Senate has passed a bill, by a vote of forty-four to one, declaring a one-year moratorium on the foreclosure of mortgages on homes.⁸

As to how far this farm revolt will go and what it can accomplish, there is a difference of opinion. It would seem that the Grange and the Farm Bureau, two of the leading farmer organizations, have thus far opposed the movement. There is, perhaps, as much pathos as danger in it. In fact, when the farmers speak of the possible revolution, it is usually with fear. If it comes, they expect to be in it, and they *fear* to be in it.⁹ It is against their traditions.

THE TWO COMPARED

Now let us compare the present 1933 *deflation* in America with Germany's 1923 *inflation*. The Berlin Professor and the American farmer are but isolated symptoms of two general diseases.

What was wrong with Germany's sturdy middle class? The wrong was that prices went up, while interest—the *interest receivable* by that class—stood stock still.

What is wrong with America's sturdy farmers? The wrong is that prices have gone *down* while the interest—the interest *payable* by those same farmers—stands stock still.

What sent the German price level soaring? A flooding tide of money.

What sent America's price level ebbing? An ebb-tide of

⁷ *Milwaukee Journal*, March 16, 1933.

⁸ *New York Times*, March 22, 1933.

⁹ *New York Times*, February 13, 1933.

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money. There simply is not at this moment enough money circulating in America to serve its purpose. That purpose, so far as the farmer is concerned, was named in his mortgage when he signed it. But when he signed it he did not dream that, before he could pay it, the means of paying would simply be sucked out of the landscape, through no fault of his! He went on working just as hard and just as honestly, but Uncle Sam's money had been sucked away from him, and Uncle Sam did not lift a finger to reflate it and so restore the price level and so restore solvency—or, if he did, he was stopped by the self-appointed defenders of so-called "sound money," who shouted, "Inflation! Beware! Beware of German inflation!"

What is to be said of the defenders of sound money who vociferate "Beware of German inflation"? The following is to be said of them: they know the words but they do not know the tune. They know that the German inflation of 1923 was wrong, but they seem not to know why it was wrong—that it started with one inflation and added another. They seem to think that *upward* is *inherently* wrong, irrespective of the starting point and irrespective of the stopping point—though it start in the cellar and aim at the threshold of mere solvency. They are blind to the simplest relativities. They are so preoccupied with what happened to Germany in 1923 that they do not seem to see what is happening to America in 1933. They have appointed themselves defenders, but what they are defending is not sound money but unsound money—for money *deflated* from the solvency level is quite as unsound as money *inflated* from the solvency level.

Every mariner knows that when he is off his course to

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the east he must turn west; and that when he is off his course to the west he must turn east; and he knows, too, that wherever he is, he must not drift. But America has never yet had a mariner who really understood the laws of monetary navigation—unless Franklin D. Roosevelt shall turn out to be such a mariner; in which case he will be not so much mariner as Messiah.

CHAPTER II

WHO AND/OR WHAT IS TO BLAME?

PERSONAL RESPONSIBILITY FOR THE PRICE LEVEL

NEVERTHELESS, certain people armed with catch-words are now standing in the path of the Administration, trying to spoil every effort to preserve the nation's solvency through the nation's price level; and if things continue to go from bad to worse; if the farmer's beef—about five dollars before the War and now about three—shall drop to one and a half (as it may); if his corn, 64 cents before the War and now 19, shall go to 10 (as it may); if the unemployed, perhaps two million before the War and now probably twelve, shall reach twenty; if 5830 national banks, once sound but now without either surplus or profits and with only 16 per cent of their pre-war capital, shall become wreckage; if the public debt, federal, state, and local, 5 billion before the War and now 35 billion, shall reach 50 billion, with hardly a solvent tax-payer to turn it back; if the Federal budget, despite higher taxes and a half billion of economies, shall become more unbalanced than ever (not to mention the State budgets); then the guilt will be heavy on those who will have misapplied the terms of sound economics successfully. But the public will impute the guilt (mistakenly) to the present administration, as it

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mistakenly imputed the present foretaste to the last administration.

In my writings of the past twenty years I have blamed the insane workings of the historic price level upon an inanimate object—the dollar; only mildly hinting that at some future time some human agency, such as Congress and the Federal Reserve Board, might deserve a little derogation if bad became sufficiently worse, and if the excuse of ignorance could no longer be tolerated. In 1932, when I wrote *Booms and Depressions*, friends urged me to make it a personal fight.

But last summer, bad started to get better. From the third week in June to the second week in September, the nation's price level recovered a part of its lost ground: it rose by $6\frac{1}{2}$ per cent. Soon, however, not only was the $6\frac{1}{2}$ per cent wiped out, but 8 per cent additional loss was registered. In fact, the lowest point (to the date of this writing) was reached just as the present administration took office—in the first week of March, 1933. And, for this defeat of a promising start toward recovery, human beings with catchwords are, I believe, chiefly responsible.

Upon those human beings, however, a correct judgment cannot be pronounced except by those who have correctly judged the inanimate object. So, once more, with what patience we can muster, let us return, for the space of a chapter, to the mechanical defects of our whimsical and unstandardized American dollar. Fortunately, we are this time provided, not only with old proof, but with some striking new proof for which we are indebted to new investigators, and especially to Professors George F. Warren

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and Frank A. Pearson of Cornell, whose recent book on *Prices*¹ marks an important forward step in this field.

MONEY-PRODUCTION VERSUS GOODS-PRODUCTION

The harm accomplished by a price level which can never be found in the same place—harm in the shape of bankruptcies and strikes and violence and sabotage and farm revolts and ragged veterans marching on Washington—will be the theme of later chapters. The fact that these insane jumpings of money can be quelled—and have been quelled by one country—will be the theme of the closing chapters. The present chapter is designed to show:

I. Abundance and scarcity of goods have never substantially moved the price level;

II. Inflation and deflation of the circulating medium have, from time immemorial, moved it up and down like a child's skipping rope.

A generation or two ago there was some excuse for the general neglect of this absolute fact, for there was no definite criterion of what a price level is. But, at last, statisticians have perfected a formula which serves the purpose. This formula—or its result, rather—is known as “the index number of prices,”² meaning a single number employed to

¹ John Wiley and Sons, New York, 1933.

² The Art of Index Numbers, which began about two generations ago, has reached a high degree of development only during the last half generation. Hundreds of index number formulae are now current. They are used in most leading countries, and often under government direction. They vary in the selection of the goods, in the “weighting” (*i. e.*, distribution of emphasis) and also in the type of average, whether arithmetical, geometrical, or other. But among the best, the resulting curves are almost identical. This was proved by applying over 100 index formulae to the market and superimposing the resulting lines on one another. See *The Making of Index*

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represent the assorted prices of all the assorted goods in the nation's composite budget of goods.

THE INDEX NUMBER

The procedure is to select a period of time, preferably one of minimum price disturbance, such as 1913 or 1926, and get the typical price of each significant article in that year. This price is called 100 per cent. Never mind whether it be \$5.00 for a barrel of flour or \$20.00 for an overcoat; the figures are treated alike, in the sense that each is 100 per cent of itself. In this way, we give to both prices—the price of flour and the price of overcoats—the *same starting point* (100 per cent) in order to compare more correctly their subsequent *relative motions*, up or down from that 100 per cent level, which is represented by a point on a chart.

The following week, the same goods are checked, still in terms of percentage. For instance, if flour in the second week is selling for \$6.00 instead of \$5.00, the flour ingredient is up 20 per cent—that is, the price is 120 per cent of the 1913 price for flour. If overcoats, at the same time, are down from \$20.00 to \$18.00, the overcoat figure is down 10 per cent—that is, the price is 90 per cent of the 1913 price for overcoats. Thus the price *level* (as between flour and overcoats) is no longer 100 per cent but is the average between 120 per cent and 90 per cent, which is 105 per cent.³

Numbers, Revised (500 pages), by Irving Fisher, Houghton Mifflin Company, 1927. The best index series in America is perhaps the monthly series of the United States Bureau of Labor Statistics, dealing with wholesale commodity prices. Formerly, it was published yearly. My own (published every Monday in the press) was the first weekly index series. The Bureau of Labor Statistics now publishes a weekly index.

³ If we take the simple arithmetic average; there are other and better methods of averaging.

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This figure is "the index number" of the two prices and is represented by another point on the chart, for the second week—at 105. But, of course, the same operation has to be performed for *all* the prices in the composite,⁴ and one point registered for them all in the second week. This point represents their average change from the initial 100 per cent position. The new position may turn out to be

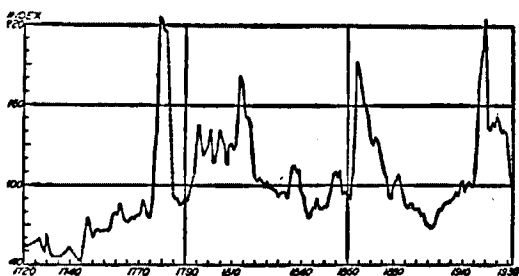


CHART I. INDEX NUMBERS OF WHOLESALE PRICES IN THE UNITED STATES FOR 213 YEARS, 1720-1932.

1910-14 = 100

90 per cent or 101 per cent or what not, and is called the "index number" of the prices (in the second week) of *goods as a whole*. If, therefore, a series of points for the 52 weeks of the year is established and a line drawn through them, a vivid picture is produced of the price level, hop-skip-and-jumping across the page of history. Here, in Chart I, is the grotesque picture, based on wholesale prices, for 213 years of America.

⁴ In practice it is done only for a selected list of the most representative and most nearly universal goods. The selection of samples must, of course, be subject to change in order to keep up with the times.

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Who or what is to blame for the outrageous vagaries of this line? Remember that the line is an *average*—an average of price movements. There is, of course, and ought to be, a certain variety and inconsistency among the price movements of different articles, but if they simply went every-which-way under the laws of chance, the average line in the midst of them would be practically level. If, therefore, the line in the midst of them goes up, it does so because all the lines collectively had gone up; if it goes down, it is because all collectively had gone down. If the wheat line be recorded on the same chart ⁵ it will be seen to twine itself about this composite line, departing from it a little here and there, but still following its great bends like a twining vine. Some great and self-consistent force must have drawn these collective prices all at the same time, first up together and then down together. It was not chance. Who or what did it? Who or what is guilty?

There are two suspects:

- (I) Money (inflating and deflating),
- (II) Goods (under the dominion of Supply and Demand).

THE ARGUMENT FROM REASON

Before invoking the witness of history and of statistics, let us try reason as a sort of preface to history.

The chief objectives of daily human effort are SECURITY AND HEALTH. Hence the great bulk of the composite of goods are goods fundamental to the process of conducting life; such goods as: *food, clothing, shelter, recreation*; and also the raw materials for these, and the

⁵ This is done in Chart 5, p. 40.

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means of *producing* and *transporting* these, and the raw materials for such producing and transporting.

Why should the supplies and demands of these basic articles all go by concert? Could there be such an extraordinary coincidence? Each, it is true, has its own accidents of sun and rain; some have accidents of fashion and invention—all these (sun, rain, fashion, invention and still other forces) operating within the scope of Supply and Demand. But these are miscellaneous factors acting separately on a miscellany of separate goods. They go every-which-way; and their average influence should work out like heads and tails, in an approximate offset and neutrality, only seldom joining in any great concerted up-influence or down-influence.

Money, on the other hand, must tend to affect all prices alike. If its circulation inflates, it must tend to inflate *all* prices (in the sense of putting each one higher than it would otherwise be); and if it deflates, it must tend to *deflate* all prices (in the sense of putting each lower than it would otherwise be).

In thus moving or affecting all prices in concert, the tide of money does not in the least interfere with the *relative* ups and downs of individual prices. The individual prices are still subject to enlargement or contraction by separate influences operating within the various inconsistent supplies and demands, but the *scale* of the whole assortment of motions enlarges or diminishes as the money tide swells or ebbs.

If you sit before a moving picture of a dozen sea waves surging up and down, and gradually the camera approaches the sea and registers a "close-up" and then gradually with-

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draws again, you have an excellent illustration of the *scale* of prices. The dozen waves do not get bigger and then smaller with reference to each other, but the entire *scale* gets bigger and then smaller.

Precisely such are the effects of monetary inflation, followed by monetary deflation.

I was in Germany in 1922 when the great inflation—ultimately a trillion-fold—was still not over fifty to a hundred-fold. The Germans, for the most part, did not then know what it was that was enlarging the scale of prices, but they were awakening to the fact that the enlargement went by scale; and later, for the purpose of deliberately computing this scale from day to day, they came to invent an astonishing economic device, called the “multiplier.” In hotels, for instance, where they had a different price for every article and every service—rooms, meals, candy, caviare, phone service—they wearied of printing a new schedule of every single price every single day; so they let the old schedule stay posted, and put up merely *one* new figure every day; and that one figure was the multiplier. Whatever the service was, you looked it up on the posted schedule, then you multiplied by the multiplier for the particular day, and paid accordingly (out of your bushel basket of paper marks). I first encountered the beginnings of this device in a German taxicab. At the end of the trip, I examined the meter and was dumbfounded. “How can the man afford to carry me for two and a half marks,” I thought. But when, in an experimental mood, I offered him the two and a half marks, it was the driver’s turn to look surprised, and a bit suspicious.

“Ach, nein!” he said, “You have to multiply.”

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"How much is it, then?" I asked.

"Two hundred and fifty marks."

The next year it would have been 250 trillion marks.

THE EMPIRICAL ARGUMENT

So much for pure reason.

But history supports reason to the hilt. For, by historical research, we find as follows:⁶

Countries with like money have like price movements.

Countries with unlike money have unlike price movements.

The average or composite price line goes in large curves.

Individual price lines twine about the average price line.

The departures of such an individual line from the composite line are mostly trifling.

These trifling departures correspond pretty closely with the production record of the article represented, while the swings of the composite line correspond with the inflation and deflation record of money.

PRICES AFTER THE DISCOVERY OF AMERICA

A century after the discovery of America, its gold and silver mines began to pour their metals into Europe. Spain owned most of the mines, and Spain was the first recipient, followed by the Netherlands and then Europe generally. Accordingly, European prices soon rose, and in the same order: first in Spain, then in the Netherlands, then in Europe generally.

⁶ See *Why the Dollar is Shrinking*, by Irving Fisher, Macmillan Company, New York, 1914.

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PRICES IN THE NINETEENTH CENTURY—FOUR PERIODS

1. (1789-1809): In this period, gold and silver (and especially silver) increased, thus tending to lift the price level; and at the same time, the Napoleonic Wars interfered with trade, thus further tending to lift the price level. Accordingly, the price level in England rose 100 per cent in these twenty years.⁷

2. (1809-1849): In this period, bank credit (that is, checking accounts based on bank loans) increased, tending to lift prices, but this tendency was moderated by a lull in the production of the precious metals, and was further opposed by the increase of trade which followed the rebound from the Napoleonic Wars. The net effect was that prices in England fell 50 per cent in these forty years. In the middle of this period, however (after 1833), there was a brief upsurge of prices which Jevons could not account for, but which was perhaps due to the 1830 gold discoveries in Siberia.

3. (1849-1873): In this period two great monetary influences were upward: gold, which flooded from California in 1849 and from Australia in 1851 and 1852; and banking, which increased. Consequently (although with two notable interruptions) prices rose. In England the rise was 50 per cent; and similar movements occurred in France and Germany.

Toward the end of this rising period, the price line for the United States separated itself from that of England by suddenly towering 125 per cent in four years (1860-64) and

⁷ And there were similar rises in other countries, though less accurately recorded.

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almost as suddenly falling three-quarters of the way back in nine years (1864-73). This flare-up was largely due to the Civil War with its special inflation of greenbacks (redemption being abandoned) and then deflation of the greenbacks; but it must be added that the ups and downs of the price level were accentuated, in this case, by the slump in trade during the war, and its revival afterwards.

THE SCRAMBLE FOR GOLD

In the foregoing period there were three types of monetary base: (1) in a large group of nations, including France, Italy, Belgium, Greece and others, the base was bimetallic—either gold or silver being accepted for coinage at the ratio of fifteen and a half grains of silver to one of gold; (2) England was on an exclusively gold base; (3) some of the oriental nations were on an exclusively silver base.⁸ The practical effect of this arrangement was to keep the ratio of silver's purchasing power to gold's purchasing power at about fifteen and a half to one *in all three groups*, the gold-silver group serving as a sort of clearing house between the gold group and the silver group, through the operation of Gresham's law. That is, whenever, in the bimetallic group, gold grew too abundant and was thereby cheapened as compared with silver, some of the silver fled to a silver country where it would buy more; and conversely, whenever silver grew too abundant in the bimetallic group and was thereby cheapened as compared with gold, some of the gold fled to a gold country where it would buy more. This flow of either metal, from where it was cheap to where

⁸ The United States, up to the Civil War, was on 16 of silver to 1 of gold.

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it was relatively dear, soon equalized^{8a} its value in the two places. Thus the buying power of fifteen and a half of silver never got far from the buying power of one of gold. This went on for seventy years.

But, about 1873, came the great change. Silver was becoming so abundant in the bimetallic countries that it bade fair to push gold *entirely* out of them; so France and her bimetallic associates, in order to maintain exchange parity with England, abandoned bimetallism and all went over, one at a time, to the gold standard. In 1873, America, which was still on her Civil War paper, nominally joined in the so-called "scramble for gold," though actual gold redemption did not begin till 1879.

AFTER GOLD AND SILVER WERE DIVORCED

4. (1873-1896): The price level now began a long and, for the most part, slow descent. This descent was due in part to a slackening in the growth of bank credit, in part to a slackening of gold production, but chiefly to this so-called "scramble for gold"; for the available gold had to be split among more nations, with less for each. At one and the same time, the silver countries were flooded with the silver which had been turned away from the mints of most countries. Therefore, prices in the silver countries (so long as they remained silver countries) rose, while prices in the gold countries (as fast as they became gold countries) fell. The figures for this period of divergence (1873-1896) were, on the average, as follows: prices in silver countries rose 17 per cent; prices in gold countries fell 22 per cent.

^{8a} See "The Mechanics of Bimetallism," by Irving Fisher, (British) *Economic Journal*, Sept. 1894.

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This is the most interesting monetary development of the Nineteenth Century; that until 1873 all the price levels of the world were as one price level, moving up and down in concert, and then, suddenly, flew apart, rising in one region on the separated silver, and falling in another region on the separated gold.

Moreover, the fall in the United States was in spite of a reduced production of goods. At first, many economists thought that goods-production had increased, thus helping the fall of prices; but investigations by Carl Snyder and Willford I. King eventually proved that, though production had increased in the gross between 1879 and 1896, it had decreased *per capita*, thus imparting an up-push to prices; so that their *down-swing* was all the more conspicuously ascribable to the deflation of gold.

PRICES IN THE UNITED STATES

1864-96

The world's great gold deflation, therefore, was in the period 1873-1896, but the American deflation began earlier and was made steeper because of America's recession (beginning in 1864) from her brief up-flare of greenbacks.

The deflation in America hurt the American farmer of that day, much as the present deflation is hurting the American farmer of today. The bottom was reached in 1896.

1896-1914

In 1896, Mr. Bryan became the farmer's champion. So far as diagnosis was concerned, Mr. Bryan was far nearer

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the truth than he was then credited with being. He properly ascribed the plight of the farmer largely to deflation. His proposed remedy, however, might have been devastating; for he demanded more than the mild deflation that the situation called for—he asked that the United States let loose a sudden Niagara of silver; this, incidentally, would probably soon have put us off the gold standard. But the inflation he had prayed for—suddenly and on a flood of silver—did come, only more slowly and on a flood of gold, which by a strange chance started almost immediately after his campaign; for then it was that Colorado, Alaska, Canada, and South Africa opened new gold mines; and, at the same time, the cyanide process was introduced, making it practical to work low grade ores which otherwise would have remained in the ground. The quantity of legal tender money was doubled; at the same time, bank credit was trebled and the speed of the bank credit was increased fifty per cent, all of which tended to lift the price level. Trade, however, increased two-and-a-half-fold, tending to *lower* the price level. But, as usual, the monetary forces prevailed, and the price level rose fifty per cent in the United States from 1896 to 1914.

PRICES IN EUROPE AFTER 1914

The World War shook the nations of Europe off of the gold standard, leaving them without any common base; for, of course, the paper of no country would circulate in any other country. The result was that the various European price levels flew apart like so many toy balloons after the cutting of a golden string which had been holding them together. They rose to all sorts of different altitudes accord-

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ing to the different rates of paper inflation in the respective countries. "In Britain, between 1913 and 1920, the price level rose more than 3 fold; in France, more than $5\frac{1}{4}$ fold; in Italy, more than $6\frac{1}{2}$ fold; in Austria, between 1914 and 1922, more than 17,000 fold, which, in 1925, became more than 21,000 fold; in Russia, by 1922, over 4,000,000 fold, and this, in 1923, became more than 6 billion fold. In Germany, for 1920, the rise was only 15 fold, but at the peak of inflation in 1923, it went far above the astronomical figure of a trillion fold."⁹

CHARTS ON PRICE DIVERGENCIES UNDER DIVERGENT CURRENCIES

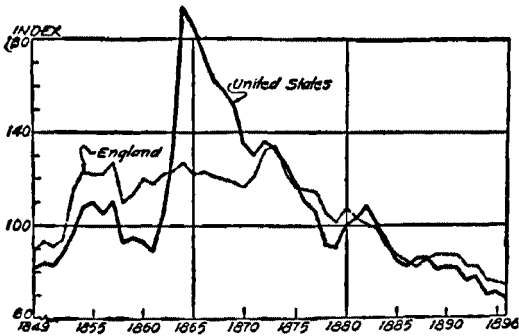


CHART 2. INDEX NUMBERS OF WHOLESALE PRICES IN ENGLAND AND THE UNITED STATES, 1849-1896.

1910-14 = 100

⁹ *Booms and Depressions*, by Irving Fisher, George Allen & Unwin Ltd., 1932, pp. 154-155.

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The contradictory movements of the price levels of different countries under different monetary systems is vividly shown by the following charts.

Here, in Chart 2, notice the family likeness between England and America in the periods when the systems were approximately the same, and the divergence when the United States, for Civil War purposes, went on a paper basis, first inflating and then deflating it.

Here, in Chart 3, we see the independent and often contrary behaviors of the price levels of the United States (on gold) and China (on silver).

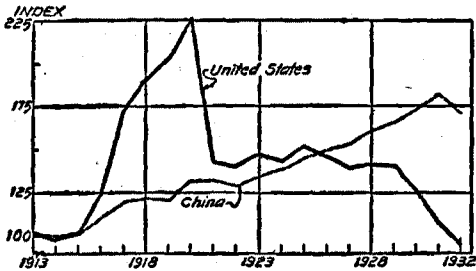


CHART 3. INDEX NUMBERS OF PRICES IN CHINA AND IN THE UNITED STATES, 1913-1932.

Pre-war = 100

CHARTS ON THE INCONSISTENCIES OF PRICE MOVEMENTS AND PRODUCTION MOVEMENTS

The following four charts illustrate how the price of an individual product often goes counter to the influence

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of its own physical supply and follows the ups and downs of the composite price level.

Here, in Chart 4, for example, we are able to cover twenty-five hundred years of the price of wheat, strictly in terms of one kind of money (silver) for the whole period.

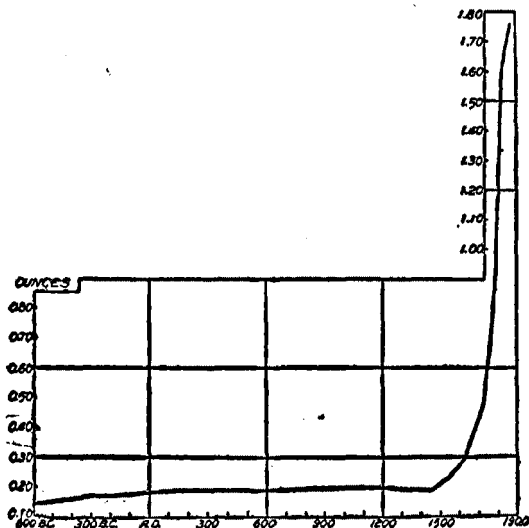


CHART 4. PRICES OF WHEAT IN SILVER FOR 2500 YEARS.

The point to be noted is that, after the discovery of America, the price of wheat shot up like a sky-rocket (a four-hundred year sky-rocket), concurring with a silver-supply sky-rocket, and not in the least concurring with either wheat production or wheat demand. These production-demand

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factors are not recorded in the chart, but history records quite sufficiently that the production of wheat did not dwindle in these sky-rocket years. On the contrary, the two Americas were constantly adding to the production, and this would tend to lower the price of wheat—not raise it. Nor did the *demand* for wheat *increase*; on the contrary, substitutes for wheat were continually entering into competition with it, thus further tending to lower the price of it;

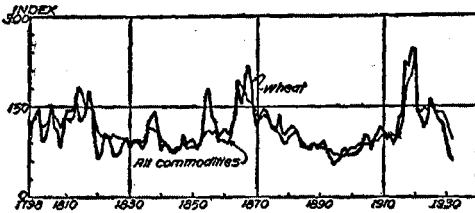


CHART 5. INDEX NUMBERS OF WHOLESALE PRICES OF WHEAT AND ALL COMMODITIES, 1798-1932.

1910-14 = 100

so that the chief demand factors and the chief supply factors would *both* tend to lower the price of wheat, not raise it.

What did raise it, then, century after century, in terms of silver? Of course, it was the silver itself, which started inflating after the discovery of America.

In this chart (number 5) we see the wheat-price line following the composite price line, persistently twining about it for one hundred and thirty-two years,¹⁰ whereas, in the

¹⁰ Moreover (as shown by other charts in *Prices* by Warren and Pearson, pp. 28 and after) food prices considered as a group followed the same composite price line about as closely as wheat did; and corn followed the

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first of the two charts below (numbers 6 and 7) we see the same wheat-price line (for the closing thirty-five years of the period) with equal persistence turning away from the dictates of its own physical supply (*i. e.*, not going down when production goes up, and up when production goes down).

Now if we are right in ascribing the great ups and downs

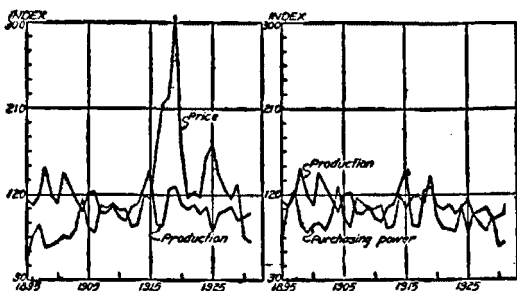


CHART 6. INDEX NUMBERS OF WHEAT PRODUCTION PER CAPITA IN THE UNITED STATES AND DECEMBER PRICES, 1895-1931. CHART 7. INDEX NUMBERS OF WHEAT PRODUCTION PER CAPITA IN ITALY AND ITS PURCHASING POWER DECEMBER PRICES, 1895-1931.

of the composite price line almost wholly to the effects of monetary inflation and deflation, then the small departures of the wheat line *from* that composite line (Chart 5) are *all that can fairly be ascribed to the influence of production and consumption*; so that if we chart these slight departures *by themselves*, and lay them on the wheat production

composite line so closely that the two can hardly be distinguished. "Those who would attribute recent declines of corn to over-production," say Warren and Pearson, "would do well to first explain the variations of the last century."

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line of Chart 6, *then* we ought to find a real correspondence between the wheat production line and the wheat-price line—the price falling as the production rises, and rising as the production falls. That is precisely what appears in Chart 7. In that chart we see the wheat price (thus divorced from the general price level) going down as production goes up, and up as production goes down, with a correspondence that is striking. The correspondence would be still closer if *all* the factors of Supply and Demand (not production alone) could be charted.

In a word, when we subtract from the wheat price what we claim to be the influence of monetary changes, the remainder is what it ought to be if our claim is right: that is, the remaining changes are due to Supply and Demand; and we find these changes to be very small compared with the changes due to monetary inflation and deflation.

COMPOSITE PRICE VS. COMPOSITE PRODUCTION

Change in general production is shown in Chart 8.

Notice that this composite production line is an almost steady rise. It rises, like a compound interest curve at 4 per cent per annum (latterly 2 per cent). This long, slow curve is an index of progress, but also it is an index of the *steadfastness* of progress, due largely to the steadfastness of the physical supply and of the human desire for the chief goods which human beings buy and sell—the goods that are fundamental to the ordinary process of conducting life, goods which serve the great instinctive objects, SECURITY AND HEALTH—such goods, namely, as food, clothing, shelter, recreation; the raw materials for them; the means of

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producing and transporting them; and the raw materials for the means of producing and transporting.

Notice, first, the steadfast *smoothness* of this goods line; and notice, second, the steadfast *upwardness* of it. If this line were the chief influence on the composite price line, that line, too would be steadfastly smooth—but also steadfastly DOWN! It would be *symmetrical* to this produc-

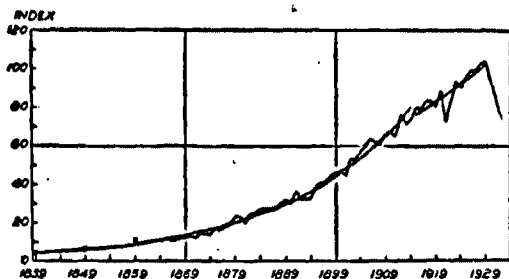


CHART 8. INDEX NUMBERS OF THE PHYSICAL VOLUME OF TOTAL BASIC PRODUCTION IN THE UNITED STATES, 1839-1932.

1926-30 = 100

tion line, both of them using the horizontal as a symmetry axis. Now turn to Chart 1 (on page 27) and see the actual price line. *First*, if it is steadfastly anything, it is steadfastly crooked rather than smooth; *second*, if it can be said to have any net direction at all, that net direction is up rather than down.

IF MONEY AND GOODS WERE GEARED

What we need is that the money circulation (meaning

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its total effectiveness which involves both volume and speed)¹¹ shall be steadfastly *proportioned* to the fairly steadfast needs of business; that is, we want to see the line for money moving *parallel* with this line for production. The ratio between the two would then be constant; that is, if all the goods for a year increased 4 per cent, and the money to buy them with also increased 4 per cent, the average price (the price for a cross-section of the goods) would be the same as before. In other words, the *price level* would be constant and really level. In that case, the steady *increment* of *real* wealth (represented by this production line) would be more equitably shared instead of deserting, first, the Berlin professor and then the American farmer.

Our solicitudes should, therefore, be:

(I). Goods *per capita*,

(II). Money Circulation *per goods*.

The goods should increase *per capita*, and the money should follow suit—increasing *per capita* but neither increasing nor decreasing *per goods*. Real inflation and deflation are inflation and deflation *per goods*; and the weekly test of whether the goods and the circulation are in step is the index number of prices.¹²

If the price level were flattened, a dealer in any line of business would still be subject to the ups and downs of his

¹¹ For a brief discussion of the "equation of exchange," see *Booms and Depressions* by Irving Fisher, Chapter X, Allen & Unwin Ltd., 1932. A fuller treatment may be found in *The Purchasing Power of Money* (same author), Macmillan, 1913.

¹² Absolute perfection would probably be a *very slightly* rising money line, resulting in a slightly lowering price line, thus making it easier for the working and middle classes to share the gains in production. But this is a refinement which, for lack of statistics, is not now practicable. Moreover, as long as we have a *dependable* standard, the working and middle classes can get their full share by wage and interest adjustments.

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own sun and rain and fashion and invention, but he would be freed from the worse ups and downs of the price level.

SUMMARY

Thus, both in detail and in the gross, history sustains plain sense.

(1) When and where there is great inflation or deflation of money, there is great inflation or deflation of the price level.

(2) Countries with like money have like price movements.

(3) Countries with unlike money have unlike price movements.

(4) The price level almost invariably shifts with *monetary* factors—gold, silver, paper, credit—and very little with *commodity* factors. The latter control only the deviations of individual prices from the average price movement. In a word, supply and demand dictate each individual price *relative to the price level, but money dictates the price level itself.*

TECHNICIANS WHO CANNOT SEE THE WOODS FOR THE TREES

So much for money as a cause, and the price level as an effect.

But, alas, not a few of the technicians *who are responsible for our money*, have thus far not seen the cause, and only vaguely seen the effect. They have not seen the woods for the trees.

CHAPTER III

THE MONEY ILLUSION AND THE BEGINNINGS OF ESCAPE FROM IT

THE MONEY ILLUSION

THAT the value of money does not change is, therefore, one of the world's great illusions. We all begin under the sway of this illusion. If prices go up or down we think, at first, that whatever it may be that puts them up or down, it is not the changing value of money. The fault, we believe, must be in the changing goods, or the profiteer, or the "bloated bondholder," or Wall Street, or the government. Thus, all untrained folk and, alas, too many who think themselves trained, accept money, as medieval man accepted the world; *he* would not believe that the world revolved from west to east, but still insisted that the sun was soaring every day from east to west. Like him are the modern victims of the "money illusion,"—or like the child on the train who seems to see the landscape whizzing by. And those who expect money to be the same tomorrow (as well as to *look* the same), are like the Peterkin children on a boat—who dropped a bell overboard, absolutely knowing they could find it again, because they had marked, on the rail, the very place where they dropped it over.

Let us begin with a less violent case of the money illusion than Germany's in 1922 or America's in 1933, because being

MONEY ILLUSION AND ESCAPE

less violent it afforded some excuse to those grown men who succumbed to it. Also it shows two men fooled from opposite points of view, at one and the same time—one riding inflation and the other riding deflation.¹

THE ILLUSION IN ENGLAND AND INDIA

Many years ago, when England was on the gold standard and India still on silver, General Keating of England fell into conversation with a Hindu merchant. The General mentioned the fall of the Indian rupee. The Hindu raised his brows, "Fall of the rupee? I haven't heard of that. Why, in fact I have agents all over India, and not one of them has advised me of a falling Indian rupee." Then, after a moment's reflection, he added, "Oh, perhaps you mean the rise of the English pound!"

As a matter of fact, both the Englishman and the Hindu were partly right, for according to the index number, the purchasing power of the rupee had fallen—that is, the rupee had fallen as compared with goods—and the purchasing power of the pound had risen—that is, the pound had risen as compared with goods; but neither coinage was responsible for the entire gap between them. Both men were victims of the money illusion. Neither could detect any motion in the boat on which he himself rode.

IN GERMANY AND AUSTRIA

But in Germany and Austria in 1918-23, the steepness and height of the inflation were such that an outsider could hardly understand the continued money-blindness of the

¹ The following illustrations are culled and adapted from my book *The Money Illusion*, George Allen & Unwin Ltd., 1928.

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Germans and Austrians. Professor James Harvey Rogers, of Yale, visited Austria in 1922, and reported the case of the owner of several paper mills. This owner happened to be a bank whose directors were very anxious not to be called profiteers. So they always sold the finished paper at less than current prices; that is, they ostentatiously fixed the prices at a modest percentage above the cost. Now this bank might perhaps have made a profit if it could have bought and sold on the same day; but it takes more than a day to turn wood pulp into paper. And, between the purchase of the raw material and the sale of the finished product, such was the speed of inflation that the money which was received for the finished product actually had less purchasing power than the money which had been paid for the raw material. The account books of the paper mills showed a gain in terms of money, but the facts were a loss in terms of the purchasing power or *value* of the money.

At last, one of these paper mills burned down. Here, apparently, was a *real* calamity. So, to mitigate it, the left-over materials were sold for what they would bring; but by this time, the market price of the raw materials was so much *more* than the bank had intended to charge for the finished product, that the books of the destroyed mill showed a bigger profit than the books of the other mills that were still running! In reality it was a loss, but less of a loss than the losses of the mills which were operating. It was a loss reduced by fire!

On the outskirts of Berlin in 1922, I talked with two very intelligent shopkeepers. I found that they were losing in the same blind way. Goods which they had bought at seem-

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ingly high prices, they sold at seemingly higher prices. They deemed it unfair to sell at more than the fair profit above *the cost of six months ago*. It simply did not enter their heads that in six months the mark had fallen so that they were losing. I asked them what caused the rising prices. They said it was the fault of the goods, the fault of the War, the fault of the recent blockade, the incompetence of the new German government. As for the German mark, evidently that, in their opinion, was simply a *mark*—once and always.

Nor could I find in Germany more than an occasional person (and I talked with high and low, on street corners and in hotel lobbies) who suspected the mark. In fact, it was largely to test this point of view that I had visited Germany.

IN GERMANY AND AMERICA

One of the most amusing cases was at my own expense. Some royalties happened to be due me from a German publisher; and upon my arrival at his place of business, he handed me 1581 marks—presumably earned mostly before the War, when the mark meant something. In fact, before the War, 1581 marks had meant about 390 dollars. But the 1922 value of the entire 1581 marks was now only eight dollars. That was much better than it would have been a year later, but it was so small compared with 390 dollars that it excited my mirth. The publisher, however, when I mentioned the matter, did not smile. "I know," he said, "*The dollar has gone up.*"

But if you do not think the German publisher was honest,

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consider the case of another German who *lost* (or tried to lose) to the advantage of an American, as naïvely as this publisher gained to my disadvantage—and all because of exactly the same illusion.

After the War, an American woman visited Germany when the German prices were up only twenty-eight fold. But instead of being a creditor coming to collect royalties, she *owed* money on a mortgage in Germany; and she went to the German bank to pay it off. What she conceived to be due was 7,000 dollars.

"But," said the astonished banker, "you do not owe us that much! You owe 28,000 marks; and, in American money, as it is today, that is only 250 dollars."

"Oh," she retorted somewhat impatiently, "you needn't think I'm going to take advantage of the fall of the mark. I'm going to pay the 7,000 dollars which I owe."

And still the banker protested.

Was the lady honest? Just as honest as the Peterkin children and the German publisher. For American money, measured by purchasing power—the only honest measure—had deteriorated too, though not so much as the mark. To pay back as much purchasing power as she had borrowed, the lady should have paid, not 7,000 dollars but 12,000; but had the German said so, the lady would have been as outraged at being asked to pay 70 per cent above what *she* thought was due, as the German was perplexed at getting twenty-eight times as much as *he* thought was due.

THE GOLD MONEY ILLUSION

But, of course, Germany was on a paper basis. Accordingly, many an American would say, "If Germany had been

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on gold, the German banker would not have been such a fool as to expect less than he got from the American woman. For gold, you know, is really stable."

But no. Gold is so unstable that when the American woman paid on that basis, the banker was still cheated to the tune of five thousand dollars out of twelve. Gold is so unstable that most of the time from 1873 to 1896 it cheated every debtor in America and most of the time from 1896 to 1914, every creditor. Gold is subject not only to the outpourings of new mines but to the influence of all other currency, including credit.

There is one kind of stability about gold, however, which cannot be denied: a twentieth of an ounce of it always costs a dollar. It has not changed in *that* respect since 1837—nearly a hundred years ago—when Congress first said that one-twentieth of an ounce of gold was a dollar. It still is so. It was so in 1920 when I had to go to the dentist's, in the midst of a high cost of living.

During a lull in the dentist's proceedings, I said, "I suppose that, like the rest of us, you're hit by this high cost of living?"

"Yes, I'm hit all right."

"Pay more for your supplies?"

"Sure."

"More for your gold?"

"I suppose so."

I professed surprise and doubt; so the dentist sent his secretary to look the matter up in his books. She presently returned, wide-eyed, and said, "Why, doctor! The price hasn't changed since you went into business!"

"Now isn't that remarkable?" said the dentist. "Gold is

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certainly stable. No wonder Uncle Sam chose it for money."

"Well," I said, "do you think milk is stable?"

"Nothing like gold," he replied.

"Doesn't a quart of milk still cost two pints of milk?" I asked.

"I don't get you."

"What is a dollar?" I asked.

"I don't precisely know. What is it?"

"A twentieth of an ounce of gold—that's a dollar."

"Well?"

"Well, you're still paying twenty dollars for an ounce of gold. A twentieth of an ounce of gold still buys a twentieth of an ounce of gold."

The superstition that gold has some inherent quality which puts it in a special class where alone stability resides—everything outside of it being unstable—is a curious accident of history. Gold was chosen as the monetary base, X primarily for reasons of physical convenience, not for stability of purchasing power. The fact that, by the arbitrary dictates of statute law, an ounce of pure gold cannot be anything but \$20.67 is not good cause for boasting, but rather for lamenting. It prevents the supply and demand of gold from changing the price of gold, and thus permits the supply and demand of gold to change the price of all goods—entirely irrespective of the supplies and demands of the goods. From 1914 to 1920 we had an inrush of gold from war-stricken Europe. Did gold become cheap? Yes, but not in terms of money. It became cheap in terms of everything else; that is, everything else became *dear* in terms of money. Recently, we have had a "scramble for gold." Did gold grow dear? Yes, but not in terms of money. It became

MONEY ILLUSION AND ESCAPE

dear in terms of everything else, that is, everything else became *cheap* in terms of money.

If any one has faith in gold, let him remember that both the greatest deflations and the greatest inflations, from which America has suffered, occurred while America was on the gold standard.

Adolph Miller, of the Federal Reserve Board during the World War, said: "Inflation is no less inflation when it is gilded with gold."

Montague Norman, Governor of the Bank of England, was recently quoted as saying, "Real stabilization will come about only when we realize that gold itself fluctuates . . . and when we have taken steps to make our monetary system really the servants instead of the masters of society."

GROPING AWAY FROM THE MONEY ILLUSION

Suppose there were a constant buying power for money. This would not mean that a thousand dollars would necessarily buy the same cargo of wheat from day to day, or the same cargo of coal, or the same cargo of men's furnishings or of house furniture, and so forth, but it would mean that a thousand dollars would buy the same *composite* cargo of all commodities together. A dollar's worth of the composite cargo would then be, so to speak, a miniature cargo. In an honest and un-disgraced system of money, such a miniature composite *is precisely what a dollar would be*, and the conventional dollar would be compelled to conform with it. At all events, whichever were *called* a dollar—whether the goods-dollar or the conventional dollar—the goods-dollar (the miniature cargo) would be the test.

Moreover, despite the money illusion which falsely sancti-

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fies the conventional dollar, a really honest dollar made of goods is sometimes to be found in the backs of people's heads—for instance, when inflation has gone so far that people begin to talk of “cheap money.” When a shopper carries his money to market in a basket and brings home his purchases in a purse, as the Southerners of the Confederate States were said to do in the days of *their* inflation, he sometimes begins to feel contempt for *money*. To this day we are still using a term of contempt for money which originated with our forefathers of the American Revolution, in the days of *their* inflation. They had their “continental” paper money, and “not worth a continental” is still a term of contempt.² Not *worth*, if you please; the point being the worthlessness of *money* as measured by *goods*.

And even under certain less drastic disturbances of the ratio between money and goods, we sometimes still feel in the backs of our heads that the goods are still the test of the money. The workman, for instance, has this instinct, when he talks about “*real*” wages, as distinct from *money* wages. In 1918, when the price level was going up, carrying with it “the cost of living,” wages in terms of money started up also; but late, as usual—and the lateness spoiled things for the workman. “Sure, my pay has been raised,” he said; “but the cost of living has been raised *more!* I can’t buy for my family as much today as I could two years ago; and what I can *buy*—that’s my *real* wages; *shoes, coal, food, clothes and a bit of a movie now and then.*”

And finally, without any noticeable disturbance of the ratio between money and goods, a man sometimes finds

² Doubtless by 1923 this was largely true of Germany—but not in 1922 when I was there.

MONEY ILLUSION AND ESCAPE

himself in a situation where, half-consciously, he measures the money by the goods; for instance, when the money is strange and has strange names: as when an American finds himself abroad, struggling to reckon the cost of his meals and his souvenirs. "A thousand lire for that picture? How much on earth *is* that? Can I afford it?" What he really means is, "If I buy it, how far will the thousand lire eat into my year's needs as to *shoes, coal, food, my weekly golf and my daughter's schooling.*" In such cases, the goods almost achieve recognition as the true measure of value.

HISTORY OF ONE HUNDRED CENTS

We have already charted the ups and downs of the price level. But whenever, in the charts, the price level doubled, the purchasing power of each dollar was, of course, cut in half; and whenever the price level was cut in half, the purchasing power of the dollar was doubled. So, instead of tracing the price level, let us now trace the purchasing power of the dollar. For a test, we must establish a goods-dollar; and for this purpose, let us go to the fairly steady pre-war year, 1913. Any other year would serve, but let it be 1913. Whatever composite of goods a conventional dollar would buy in that pre-war year (1913) shall here be called a dollar; that is, in the pre-war year, the goods-dollar and the conventional dollar shall both be regarded as a dollar—"100 pre-war cents."

On that basis, the 1860 conventional dollar was worth 96 pre-war cents; the January 1865 dollar was worth 47 pre-war cents; the 1896 dollar, 150 pre-war cents; the May 1920 dollar, only 45 pre-war cents; the 1922 dollar, 72 pre-war cents; the 1923 dollar, 69; the 1927 dollar, 70; the 1929 dollar, 71;

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the 1930 dollar, 81; the 1931 dollar, 98; the March 1932 dollar, 111; the June 1932 dollar 118; and the dollar for the first week in March 1933, 126 cents. In other words, the dollar of the first week of March 1933 (the current year) was 26 per cent bigger than the 1913 dollar; 57 per cent bigger than the 1930 dollar; 75 per cent bigger than the 1929 dollar; 82 per cent bigger than the 1926 dollar; and 204 per cent bigger than the May 1920 dollar, a record which ought to dismay the self-appointed defenders of so-called sound money.³

³ The reader who has dealings abroad is accustomed to translate foreign money, such as marks, rubles, and so on, into dollars. It would be good exercise and a good habit if everyone would translate dollars into goods. This can be done by multiplying the nominal dollar by its purchasing power, as published every Monday in the press, in connection with my index number of (wholesale) prices—the comparison being with the year 1926 (instead of 1913). In this way, he can compare the balance of his debt today with what the whole debt was in 1926, and likewise his costs, profits, losses, savings, insurance, and so on.

TRAGEDIES OF THE UNSTABLE DOLLAR

A CHEAT BY THE DOLLAR, EQUIVALENT TO A COMPOSITE OF CHEATS

LET us suppose that a dry-goods merchant agrees to sell a yard of cloth, and when he turns his back to pull the merchandise from the shelf, the yardstick lengthens by 50 per cent. Even 10 per cent would be unconscionable. Suppose the grocer sells a bushel of potatoes and while he is reaching for the bushel basket, it swells 50 per cent. Even 10 per cent would be a scandal. Or suppose it is the other way about. Suppose the yardstick shortens and cheats the buyer; suppose the bushel basket shrinks 10 to 50 per cent. Suppose, in a word, that first the producer and then the consumer is invisibly short-weighted. That would be disgraceful enough. But suppose both the yardstick and the bushel basket and also the pint, the pound, the kilowat and every other unit employed in trade, should *simultaneously* swell or shrink. Business would become bedlam; and this is equivalent to what happens when the dollar swells or shrinks. Take the case of a great store, dealing in all sorts of miscellaneous articles. Imagine the dollar (or all the dollars of a day's trade) shrinking 50 per cent. It is as if *all* the physical measures used by the store—yards, bushels, pints, pounds—had shrunk 50 per cent *simultaneously*.

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THE DOLLAR, THE ONLY UNREFORMED UNIT

Time was when the yard was merely the distance from the king's nose to the end of his outstretched arm—a test which caused the business man's yard to swell or shrink, according to the stature and growth of the king.

And the other measures were no better.

But nowadays, all the measures except the dollar have reformed. Every town has its Sealer of Weights and Measures; and the Federal Government in Washington, acting under the mandate of the Constitution, has long since established a Bureau of Standards; and, so far as weights and measures (other than the dollar) are concerned, nothing could be more scrupulous, nothing more scientific, than the Bureau of Standards. The standard for linear measurement, for instance, (a metal bar, one meter in length) is kept under a glass case, and when tests are made with it, they are conducted by sighting the bar all the way across the room, lest the heat of the observer's body should expand it by a momentary half-hair's breadth.

And yet, the most basic and inclusive of all measuring devices still varies, sometimes by 10 per cent in a month.

THE SOCIAL INJUSTICE

What gives the dishonesty of the conventional dollar its very special power for evil, however, is partly its invisibility, due to the money illusion. Other measures—yards, pounds, and so forth—could not substantially change without being seen.

But, above all, what gives the dollar its power for evil—its power to put our whole mechanism of production and

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distribution out of gear—is its special relation to the great institution of the *time contract*. Other measures—yards, pounds—have less to do with time contracts. Things that are measured in yards and pounds are usually sold across the counter—contracted for today and delivered tomorrow before very great harm could be done by swelling or shrinking; but *money* is often dealt in across 90 days or 20 years, during which the swelling or shrinking accumulates; that is, pending the time interval, money inflates (and the price level inflates) that is, the individual dollar shrinks; or else money deflates (and the price level deflates) that is, the individual dollar swells. But, surely, if you agree to deliver goods a year hence for a price established *now*, you want the dollar to mean the same a year hence as it means now; or if you are to deliver money a year hence for goods which you receive now, or if you lend money now to be received back a year hence, or if you borrow money now to be paid back a year hence—in all these cases you have an interest in how the dollar, a year hence, is going to measure up to its purchasing power of today. Here, then, are several forms of time contracts, each involving careful computation; and whether a change of the computing instrument, in the time interval, will help you or hurt you depends on whether, at the far end of the time interval, you are to be at the receiving end or the paying end of the contract. If you are to receive the dollar, it will be nice to have its purchasing power a year hence double what it is today; but if you are to be on the paying end, such an expansion of the dollar will not be at all nice and may be ruinous.

On a previous page, the dollar of 1913 was chosen to represent 100 cents of purchasing power. This was for the pur-

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pose of comparison, and the choice of a starting point was more or less arbitrary; but, to a person who enters into a time contract, the dollar is 100 cents *at the time of the contract*, whether the time be 1913, or 1864, or 1896.

LENDER VS. BORROWER

The years 1864 and 1896 were two of the great turning points in America's chronic inflation-deflation tide. Suppose we start one of our time contracts in 1864, when the tide had begun to rush down toward 1896:—thirty-two years of deflating money (and deflating prices) or a swelling dollar—put it either way. Here is a small-town store keeper who, in 1864, borrows 1000 dollars to build a store. For him, 1864 is the starting point, and the 1864 dollar is 100 cents. Thirty years later, 1896, having meanwhile paid all the interest, he discharges the whole principal at one stroke. Apparently he pays 1000 dollars, but, compared with the dollar of 1864, each 1896 dollar is *three* dollars as to purchasing power. Instead of 1000 dollars, he has really paid 3000 dollars, measured in the purchasing power of 1864. He does not know the dollar is at fault. He only knows the store is a disappointment. It was to have sent his boy to college and paid off the thousand dollars besides—so he calculated, and he was no fool—he was “good at figures.” Well, the store paid off the thousand, but no more. The son did not go to college; he spent his life in the store; and all through the time-interval, it took more and more sales to bring in a dollar. The grocer does not blame the dollar—he blames business. So much the worse for him. He had made a *perfectly sound calculation*, and something ruined it; and that something was not the landscape—it was a perfectly capricious and meaningless

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deflation—and the deflation turned the dollar into a cheat.

But meanwhile the same deflation which cheats the *borrower* is "not half bad" for a *lender*. In fact, the deflation from 1864 to 1896 was the lenders' paradise. It was then that Russell Sage grew rich, and Hetty Green became the richest woman in the world. They were clever lenders. They did not mean to cheat; but the dollar cheated for them—being warped by deflation.¹

The next period, however, was the lender's Hades. It began in 1896 when Mr. Bryan's prayer for inflation was about to be so copiously answered by the gold mines. And the inflation ran from 1896 to 1920. Since we took a poor borrower in 1864, let us take a poor lender in 1896. There *are* poor lenders. Here, for instance, is a servant girl, who, in 1896, became a lender by becoming a depositor in a savings bank. In her case the dollar is 100 cents in 1896. She leaves a hundred of such 1896 dollars in the bank and lets the interest accumulate till 1920. Then, at the end of 24 years, she draws out the whole accumulation. It looks like 300 dollars. Nominally, it *is* 300 dollars; but compared with the dollar of 1896 the purchasing power of the 1920 dollar is only 27 cents, which multiplied by 300 comes to 81 dollars—as dollars had been in 1896, 24 years earlier. In other words, after 24 years, when she should be 200 per cent to the good, she is, in fact, about 20 per cent to the bad, so far as purchasing power is concerned. Despite the 24 years of compound interest, she ends with less purchasing power than she started with. She has lost all of the interest and some of

¹ The gains and losses are slightly mitigated by changes in the rate of interest. See *The Theory of Interest* by Irving Fisher, Macmillan, 1930.

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the principal. Perhaps this woman, grown 24 years older since 1896, had been planning to buy a 300 dollar cabin. Well, its price is now 1000 dollars. The cabin is no better and no bigger, but the honest woman's power over it is gone. If she blames the times, all the worse for her. The fact is that, in 1896, she made a perfectly sound calculation, and something ruined it; and that something was not the times; it was a perfectly capricious and meaningless inflation—and the inflation turned the dollar into a cheat.

BONDHOLDER VS. STOCKHOLDER

Sometimes lenders and borrowers are apparently united in interest by being associated with one corporation as bondholders and stockholders. But the corporation really *is* the stockholders, and when it issues bonds, the transaction is a borrowing transaction—the bondholders being the lenders and the stockholders, the borrowers. If the bond issue occurs in 1864, the fall of the price level follows: therefore the dividends fall, but the fixed interest on the bonds has proportionately more buying power. On the other hand, if the bonds are issued in 1896, the rise of the price level follows; therefore, the dividends rise; but the fixed interest on the bonds has proportionately less buying power. Thus, one class gains substantially what the other loses—all in the same business—one part of the family absentmindedly picking the pockets of the other, all under one roof, so to speak.

WAGE EARNER VS. BOSS,

(Whether the Boss be a Single Employer or a Corporation)

Wages are not fixed like the interest on a bond, but still, wages are fairly stubborn—they do not go up as fast as in-

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flation, nor down as fast as deflation. Either the workman will be stubborn when the employer proposes a wage-cut to match the lowering profits, or the boss will be stubborn when the workman demands a raise to overcome the rising cost of living. If the price level rises, it is a race between the workman's wages and the price level, with wages in the rear; and if the price level falls, it is an upper and a nether millstone with the boss in between. And the nether millstone is partly wages.

Chiefly, however, the nether millstone is the business man's business debts (bonded or otherwise)—good, honest debts, too, but not honest enough to join in the down movement of the price level, if the price level goes down. In fact, the business man's creditor is even *less* willing to take a cut than the workman is.

THE WINNER LOSES—SO DOES THE PUBLIC

Not every gain is made by one man at the expense of another. If the gain is *earned* by superior wisdom and management, both parties usually gain, and society gains also. But there are two kinds of gain which do as much harm in one direction as they do good in another: one is the gain of gambling and the other, the gain of stealing; and which of the two names—"thief" or "gambler"—best fits a swelling and dwindling dollar is open to question.

Thieves and gamblers, who win, lose in the end; but, in the price level gamble, not only do both sides lose, but all society loses.

First, in the case of deflation: When prices go down, of course the workman at first smiles, at the lowered cost of living. But presently he smiles on the other side of his face,

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when the employer (who is being crushed between the upper and the nether millstone) turns on him and says: "Sorry, boys, but half of you are now out of a job, and the other half must take a cut." Then the smiles come off and stones are thrown instead—thrown through the windows of the boss, who perhaps goes bankrupt so that *all* his men (instead of half of them) are now out of a job.

So the gains of the wage earner—improper, *deflation* gains—were temporary, and became losses in the end.

The same is true of the bondholder. He, too, gains by the same deflation until the corporation fails. Then an unexpected burden falls on him;—he and the other creditors are compelled to go into business by taking over the business that failed. Usually the job devolves upon a committee of bankers. They have to try their hands at being business directors, or at appointing business directors—and either way, they do it badly. They were never cut out for such work. Both by temperament and by experience they are precisely the wrong people. They are too cautious. That is one of the many damages that affect society as a whole; that is, at the end of a deflation period, the *wrong people are in charge*, and recovery is just that much delayed, and less successful when it comes. Moreover, the business failures spread to the banks on whose solvency all society depends.

In a word, all society loses when one half of society has been gaining at the expense of the other half.

So much for the deflation chapter. Look at the inflation chapter. Inflation at first puts the employer on "Easy Street." It is his turn to smile. "Business is fine," he says. Perhaps he thinks he made it fine. If he did, it *is* fine. But if inflation made it fine, then business is sure to turn out fine only

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at somebody's expense, and it will stay fine only until that somebody kicks up a row. And the fact is that, when the cost of living gets *too* bad, the workman begins to throw stones even without being out of a job. These riots are the first setback to the employer who had been winning at other people's expense. But there may be worse coming. For the employer, rejoicing at his inflation-profits, is tempted by those profits *to over-extend himself*, in the hope of more such profits. He may be by nature only mildly adventurous, but the exaggerated profits due to inflation exaggerate his spirit of adventure, which may turn into recklessness. He may crack up yet, and crack up banks with him—right in the middle of fine business—fine by inflation. Even the labor troubles are enough to spoil every inflationary gain; for, during a rising cost of living, the workmen, made hungry and bitter, lose more than wages. They lose certain indispensable social equalities. They lose

health,
mental balance,
working efficiency.

And so we have another social upheaval.

THE DOLLAR HAS THE LAST LAUGH

Thus, we see how this mischievous dollar (made mischievous by inflation and deflation) promotes stone throwing and class hatred. In a word, inflation and deflation are class dividers. There are, of course, some who belong simultaneously to both classes, by holding bonds and stocks at the same time. There are also *poor* in both classes. The farmer loses when the workman gains; the workman loses when the farmer gains; but neither of these blames the

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other, for even at the top of their respective gains, both are still too humble to be conspicuous. But whichever way it goes, the *humble* loser looks askance at the *rich* gainer, soon hates him, and ends by blaming him. If it is deflation and the rich gainer is the bondholder, the farmer calls him a "*bloated* bondholder." If it is *inflation* and the one who profits is the business man, the workman calls the profiteer a "profiteer." In either case, the under-dog reasons as follows: "How did *I* get poor while *you* got rich? You did it, you dirty thief. I don't know just *how* you did it; your ways are too subtle, sinister, dark and underground for simple me; but you did it just the same."

But none of us—neither the farmer, nor the workman, nor the bondholder, nor the stockholder—thinks of blaming the dollar. So the *real* culprit—the dollar, the mark, or whatnot—stands on the curbstone watching us poor mortals as we beat out each other's brains, and has the last laugh.

CHAPTER V

FURTHER DIAGNOSIS OF THE DOLLAR, AND ITS CURE

THE EXTENT OF THE DOLLAR EVIL

WITHOUT doubt we all suffer from other social harms besides those inflicted by the unstable dollar. But it is hardly possible to make too much of the unstable dollar. "A mere unit of measure!" says one critic, "it's the things measured that are out of gear!"

But how could the things measured be otherwise than out of gear if they have been measured *wrong*—especially time contracts, on which modern business is so dependent, and more and more dependent as society becomes more and more highly organized? Let us trace the penalties of a dishonest dollar in a single important case in recent history.

THE ULTIMATE HARM TO THE EMPLOYER

"Within a stone's throw of my home is the plant of a great arms company. Early in the World War it entered into prodigious contracts with foreign countries to produce munitions; but the prices to be paid, though incredibly high, were fixed by the contracts; and no sooner had the wheels begun to grind out the goods than war inflation (1914-19) sent current prices sky-rocketing, including the prices of

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raw-materials and labor needed but not yet bought for the fulfillment of the contracts. So the profits, which had looked so large to start with, got squeezed out, between fixed income and rising costs. Then, after the war, finding itself burdened with more floor space and more tools than could be used in peace times for war commodities, the company decided to devote its extra equipment to diversified hardware. Accordingly, it planted stores all over the country and put on a heavy advertising campaign. No sooner had interest and rent and wages become relatively fixed than post-war deflation (1920-21) began to force down the prices of all their products, old and new. So again the profits were squeezed out, this time between the relatively fixed costs and the lowering income. And before it could fight its way out (1921-29) came the price slump of 1929-33. Then, having been caught both going and coming, this great victim of a tricky unit of measure at last gave up the ghost. It sold out; and its former owners still wonder what hit them. No doubt they believe it was an epidemic of business dislocations; and it was—but all of them, or nearly all, were due to one sort of cause—price inflation (a shrinking dollar) and price deflation (a swelling dollar).”¹

THE ULTIMATE HARM TO LABOR (UNEMPLOYMENT)

In a capitalistic society, employment depends on the employer; and since the employer is dependent on the price level, the problem of unemployment goes back in large measure to the dishonest dollar.

Can a cause-and-effect relationship be definitely traced

¹ *Booms and Depressions*, by Irving Fisher, page 113.

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between the dishonest dollar (as shown in the price level) and unemployment?

It can.

The number of jobless men at a given time is very largely a matter of conjecture, but there are accurate figures for the

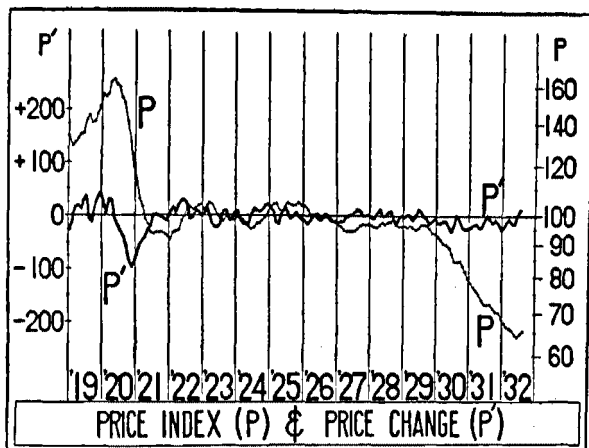


CHART 9.

ups and downs of employment itself; and if we chart a line for employment in the United States and compare it with the American price line, we shall not be left in doubt as to cause and effect.

First, over-production is not the real cause of unemployment, for Chart 8 on page 43 has already shown us that production did not rise in 1919 as charged by the techno-

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crats; and, for that matter, no great unemployment began till 1929. On the other hand, the ups and downs of the price line were followed by ups and downs of the employment line.

In Charts 10 and 11, covering, between them, the period from 1903 to 1932, are two lines: P' is the course which employment would theoretically have followed, if the price line were the sole influence on employment, and E is the course which employment actually did follow under this and all other influences.² When the two are thus laid on top of each other, they approximately fit. Minor causes of employment and unemployment, of course, modify the correspondence. The chief minor cause was the war which took hundreds of thousands of our young men away from their jobs; and yet, even for that period, the up-pull of the rising price level was so enormous that employment followed it quite noticeably. The correlation coefficient for the period as a whole is .84. And researches by Henri Fuss, made on behalf of

² In Chart 9 the Curve P is the price level. From this curve P we derive P' indicating the percentage change of the price level at any date. This is the average of the increases of P in the month preceding and succeeding said date reckoned as a percentage per annum of the index number at that date. Thus, if at a certain date, or month, the index number is 100 and it increased two points from the month preceding and four points to the month following that date, or an average of 3 points per month in those two months, the rate of change in the price level is evidently 3 per cent per month, or 36 per cent per annum. This figure 36 is the P' for that date. That is, while the index number P is 100 its rate of change P' is 36 per cent per annum. In other words P' is the *slope* or steepness of P . When P the price level remains constant, P' is on the zero line. When P ascends steeply, P' is much above the zero line. When P descends steeply, P' is much below the zero line.

P is, in turn, derived from P' . This latter derivation consists in lagging or shifting the curve P' to the right—not, however, bodily but piece-meal. I have discussed the problem of distributing the lag in the most probable manner in "Our Unstable Dollar and the So-Called Business Cycle," *Journal of the American Statistical Association*, June, 1925, pp. 181-190.

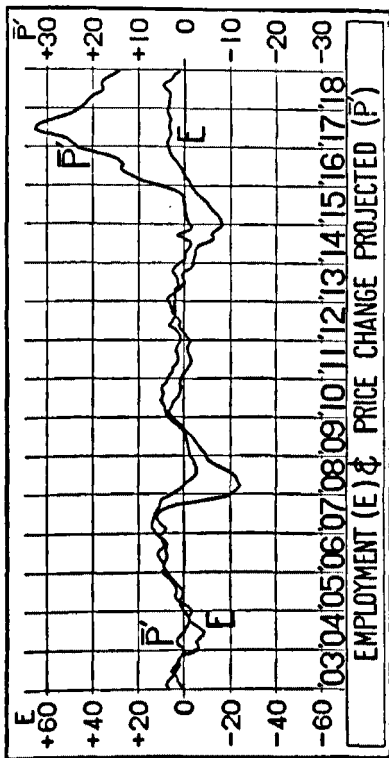


CHART 10.

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the International Labour Office, show that in eleven countries there have been (in the period 1920-26) very few cases in which these results for the United States are not duplicated.

Like the arms company, the wage earner loses both going

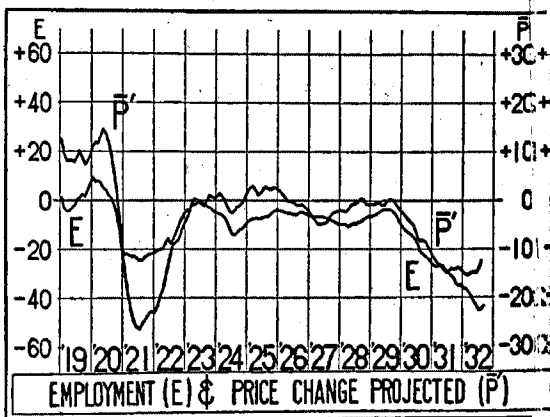


CHART II.

and coming. Either he is out of a job (on deflation), or, on inflation, his job is spoiled by the high cost of living. A steady price level would avoid both ills.

THE NET HARM TO THE SOCIAL (REAL) INCOME

Social hatred and unrest are not the only social sequels of a dishonest dollar. Material loss, too, falls on society, as

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a whole. No matter what is taken from one class and handed to another, and whether by inflation or deflation, the net real income of society—that is, physical production—is impaired. For when, by inflation, the wage earners (who are ultimate producers) and the bondholders (who ultimately finance production) are sufficiently hurt, production cannot but be hurt; and when, by deflation, the farmer (who is *the* ultimate producer) and the business man (who is the master-organizer and director of nearly all production) are hurt, production cannot but be hurt. That German inflation in 1923 reduced Germany's national physical income needs no proof. That American deflation in 1933 has reduced America's national physical income is proved by Chart 8 (page 43), where the minor ups and downs of production turn into a major drop at the very end of the curve—and that represents the present case.

Also the fall of total wealth is shown in Chart 13 (page 85).

Before diagnosing the present case, it will be well to gather from the cases already set forth, a criterion for both the diagnosis and the cure. That criterion is, of course, the price level whose fluctuations do the harm.

What, then, is a normal price level?

And when it becomes abnormal, how (if at all) may it be restored to normal?

THE "NORMAL" PRICE LEVEL AND REFLATION

There is no such thing as a "*natural*" price level. In Chart 12 (page 75) covering the American price level from 1860 to 1933, we see scores of price levels; and *nature* (which is to say *neglect*) made most of them. There is, however, such

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a thing as a "normal" price level, and it might start at any one of these many points, if it stayed long enough at the one level; for:

A normal price level is a price level at which the two ends of every existing time contract (loan, wage, salary) have been measured by an unchanged monetary unit.

This implies that, once a price level becomes abnormal, it cannot become entirely normal until it has been put on one chosen level and kept there long enough to let all the time contracts *originating on other levels*, expire, leaving extant only such time contracts as have been made *on the one chosen level*.

It does not follow, however, that the twisted and laboring and nearly run-down economic machine must wait for a generation before any repairs can be accomplished. Some relief may be administered at once, if it is administered before the machine is completely wrecked and scrapped (as it practically was in Germany and nearly is in America). And the relief is as follows:

After the price level has shot up so as to put the wage-earners, bondholders, salaried folk, creditors and savings-bank depositors under a staggering burden that threatens to derange the entire economic machine, these classes must be accorded some relief,—the relief of a partial return of the price level *downward*, even if some new or recent time contracts be thereby somewhat distorted to the disadvantage of a few business men and farmers and other debtors.

Conversely, if the price level has shot *down* so as to put the business men and farmers and other debtors (as well as the unemployed) under a staggering burden which threatens to derange the entire economic machine, *these*

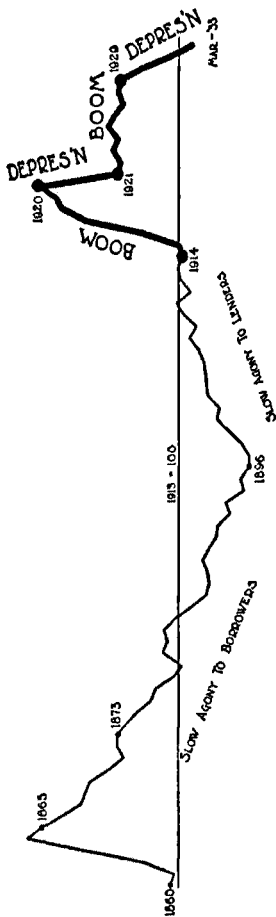


CHART 12. AMERICAN WHOLESALE PRICE HISTORY, 1860-1933.

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classes must be accorded some relief—the relief of a partial return of the price level *upward*, even if some new and recent time contracts be thereby somewhat distorted, to the disadvantage of a few in the creditor classes.

The return must not, in either case, go too far. It must go only so far as to *divide the common burden* as fairly as may be, and thereby enable both kinds of workers to get to work.

Both of these partial returns of the price level, whether up or down, are "reflations." In Chart 12 (page 75) each inflation (since it succeeded a deflation) and each deflation (since it succeeded an inflation) *began* as a *reflation*. The temporary effects, therefore, were invariably good; for instance, the *re-deflation* after 1864, and the *re-inflation* after 1896. But the good was, in each case, followed by evil, for the refations were, in most cases, sheer accidents,—they came in spite of neglect and went too far because of neglect.

CHAPTER VI

BOOMS AND DEPRESSIONS AND *THIS* DEPRESSION¹

THE OBVIOUS FEATURES

WHAT is called a depression is, for the most part, the group of tragic consequences which grow out of a fallen price level. Business gets caught between the upper and nether millstones—the falling price level and the almost stationary expenses and debts—so that the business man is compelled to narrow his undertakings and discharge some of his men; or he may go into bankruptcy which discharges *all* his men. These—bankruptcy and unemployment—are the great and obvious tragedies of a depression.

Every rise of the price level is a boom and every fall, a depression; but some are mild and some are fast and furious. Both kinds may be seen in Chart 12, which covers the long stretch of America's ups and downs from 1860 to 1933.

The chief recent examples of the fast and furious kind in the United States are the two booms and two depressions since 1914, represented by the heavy line in the chart.

¹ For fuller treatment, see *Booms and Depressions*, by Irving Fisher, Chapter IV.

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CREDIT CURRENCY IN VICIOUS SPIRALS AND A TAIL SPIN

The leading role in these recent cases has been played by credit currency, which (as few people are aware) constitutes nine-tenths of the circulating medium of the United States. Credit currency is composed of bank deposits. It circulates by check. The bulk of it is based on loans made by commercial banks to the business men of the country. In normal times, the issue of new loans and the liquidation of expired ones approximately balance each other, so that the creation of new deposits and the disappearance of old ones approximately balance each other, thus leaving the outstanding volume of bank deposit currency substantially constant. But if something big enough hits humanity, borrowing can greatly exceed liquidation so as to inflate this form of currency; or, on the other hand, liquidation can greatly exceed borrowing, so as to *deflate* the credit currency; and in either case, the credit currency develops an evil tendency of its own—a tendency which is fortunately denied to other forms of money. This tendency of credit currency (once it starts moving) is to *perpetuate its own motion in a sort of vicious circle, or rather a vicious spiral*—upward or downward as the case may be.

Upward: If business borrowing becomes excessive, it automatically inflates the volume of checks which dart about as a part of the country's circulating medium; these raise the price level, the price level raises profits, and the raised profits lure business men into extending themselves by further business borrowing, which further raises the price level and increases profits, which further lure business into over-extension—and so on and on.

THE DEPRESSION

Downward: If liquidation, for some reason, gets into a stampede, it wipes out (*i. e.*, deflates) credit currency, which lowers the price level and reduces profits, which force business into further liquidation, which further deflates the credit currency, which further lowers the price level and reduces profits, which force business into further liquidation—and so on and on: a tail spin into depression.

THE RESPONSIBILITY OF BANKS

Since business loans can be made only with the consent of banks, the banks are in a position to control this immense proportion of the country's circulating medium; and, in America, the Federal Reserve System has almost complete control, if it chooses to exercise it. But once the control is lost, pessimism and hoarding—small at first but great in the end—further deplete the currency, by immobilizing some of it in the banks and hiding some of it under the mattress at home, thus further deflating circulation² and accelerating the vicious down-spiral.

Such is a depression, which usually follows a boom, though other causes may contribute.

THE RECENT PAIRS OF BOOMS AND DEPRESSIONS

The first American boom after 1914 began with gold inflation; the gold being an influx from war-ridden Europe, whose paper money had the double effect of creating huge paper inflations in Europe and a milder gold inflation in America. But, after America joined in the war, its credit currency was inflated also, augmenting the gold inflation. This brings us to the great peak of 1920.

² Credit circulation suffers a slight retard before it shrinks in volume.

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Then, in 1920-21, came a deflation that was partly intentional. It could have been remedial had it not been carried too far, but, being carried too far, it became a brief but severe depression. It was started by the McCormick resolution in the Senate which had the effect of *taunting* the Federal Reserve Board into suddenly trying to show how strong it was—it curtailed the credit currency of the country beyond rhyme or reason.

From 1921 to '29, the credit currency was again inflated, and we had a boom, chiefly in the stock market.

Then this currency was suddenly deflated by a stampede of liquidation, which began (so far as any large manifestation was concerned) in the stock market, in November, 1929, and has since spread to every corner of the economic structure.

What started it?

THE SOURCE OF THE 1929 STAMPEDE—THE DEBT DISEASE

The depression grew out of a boom which started in a credit currency boom, which started from a debt boom, which grew out of the World War. The war was responsible not only for the war debts, but largely for the peace debts which followed; and among both the war debts and the peace debts there were international debts of every description, long and short, public and private, the obligations running in every direction, by no means toward America alone; for many Americans were indebted to many foreigners, on short time obligations *payable in gold*.

Every debit in the world has a corresponding credit somewhere in the world, and the world's net indebtedness is al-

THE DEPRESSION

ways zero; yet if "A" owes a million to "B," and "B" owes a million to "C," and so on down the line, till we find "Z" owing a million back to "A," the failure of "A" may bankrupt "B," who may then cause the bankruptcy of "C," and so on to "Z." Thus a net debt of zero may bankrupt 26 millionaires, like a row of nine-pins. In one way or another, therefore, all debts must be counted if we would measure their effect for good or ill.

Probably by 1920 (the peak of the first boom) and certainly by 1929 (the peak of the second) the bank debts and the debts of every other sort owing in America were enormously inflated. According to Charles Merz, the total burden increased in seven years (between 1922 and 1929) by 35 per cent.³ At any rate, the 1929 total was approximately 234 billion,⁴ of which amount approximately 39 billion were commercial bank debts, supporting approximately 39 billion of credit currency.

The crucial question for America was this: were these 39 billion of commercial bank debts secure, since it was they which had the direct power to deflate the price level?

They were insecure in four ways:

(1) An unusual number of the debtors had, in all probability, over-extended themselves;⁵ they were likely to have to liquidate for lack of business or for lack of business foresight in incurring the debts.

(2) All the other forms of indebtedness in this country had the effect of increasing the pressure on the 39 billion.

³ *New York Times*, February 5, 1933.

⁴ *Booms and Depressions*, page 109. The figures were computed by Dr. Royal Meeker.

⁵ In this small space, the criteria of over-indebtedness is not discussed. The point is considered in *Booms and Depressions*, pages 10 and 11.

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(3) Even the foreign over-indebtedness, by handicapping Europe, lessened the European trade, on which the American business debtors were partly dependent for solvency.

(4) The power of banks to continue the 39 billion was limited by their gold; and this gold (which alone is eligible to pay international debts) was in danger, on a moment's notice, of being subjected to a scramble among the international short term creditors;⁶ and the loss to American banks of a million dollars in gold, might compel them to call in *ten* million dollars of credit. Thus gold could harm the credit structure to an extent ten times the trifling dimensions of the gold itself.

These four conditions, therefore—(1) the sheer excess of the commercial debts owing to banks, (2) the pressure of all other American debts upon these debts to banks; (3) the handicap to trade occasioned by debts throughout the world; (4) the instability of our gold base, due to the network of international short term debts—all these influences started the crumbling of the debt structure in November, 1929, the first spectacular feature being the stock market crash.

Then came the vicious spiral, or tail spin.

And this spiral, beginning with weak debtors, took in stronger and more conservative debtors as the price level got lower and lower. Those who were not over-indebted to start with became over-indebted when the price level threatened their business. Many a debt which at first was modest became suddenly dangerous through no fault of the debtor, but as a sequel to the general over-indebtedness to which he had not contributed.

⁶ See *America Weighs Her Gold*, by Professor Harvey Rogers.

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Since this tail spin, by lowering the price level, swelled the dollar, it may be called

THE DOLLAR DISEASE

How far has the dollar disease gone? First, how far has currency been wiped out and the price level thereby deflated?

So far as Federal Reserve credit currency is concerned, its volume and its speed have both fallen—the speed twice as much as the volume, so that from 1929 to March 1932, its total efficiency (speed multiplied by volume) lost 69 per cent; and at the present writing (April 1933), the 69 per cent loss has probably become 80 per cent. This depletion worked itself out in two ways: it deflated trade, and it deflated the price level. The price level (wholesale) registered its share of the loss by a fall of 35 per cent from 1929 to March 1932. By March 1933, this loss had become 43 per cent, which means that (compared with the 1929 purchasing power) a dollar had become \$1.75.

Depression, therefore, may be described as a sequence of two diseases:

The Debt Disease (too much debt) and
The Dollar Disease (a swelling dollar).

HOW MASS LIQUIDATION IS DEFEATING ITSELF

We now come to the paradox that, if the debts get big enough, the very act of liquidation puts the world deeper in debt than ever. That is, the faster we pay the more we owe. Each dollar represented in the unpaid balance grows faster than the number of the dollars is reduced by the liquidation. Such is the essential secret of a great depression.

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Europe owes America more now than it did before America scaled her claims. The original 39 billion owing to our banks in 1929 is more now (if measured in 1929 dollars) than the whole amount was in 1929. And the same is true of the grand total. As far back as March 1932 this was *nominally* reduced to 197 billion; but meanwhile, if the 1929 dollar was 100 cents, the March 1932 dollar was \$1.53, thus translating the nominal unpaid balance of 197 billion into a "real" unpaid balance of 302 billion (measured by the 1929 dollar)—whereas the original 1929 debt was only 234 billion. This swelling was caused by the deflation of the price level, *and the deflation was caused by the liquidation itself*. Payment could not catch up with the "real" indebtedness—the more we paid the more we owed. And up to this writing (with the dollar up to \$1.75, as compared with 1929) the case is still worse.⁷ There has been no real liquidation. On the contrary, the people's real debts are heavier than in 1929, heavier than in March 1932, heavier than ever before in all history. Their interest, rent and taxes are also heavier; and at the same time, their real income and real wealth are less.

The fall of wealth and the rise of real debts are vividly shown in Chart 13.

REFLATION OR COLLAPSE

The causes of this tail spin, which could have been thwarted in 1929, *must* be thwarted now. Only two courses are open:

⁷ The figures for March 1932 were carefully computed. See *Booms and Depressions*, page 109. It is not yet possible to bring these computations (including many classes of debts) down to date, but such computations as have been made fully justify the conclusions stated above.

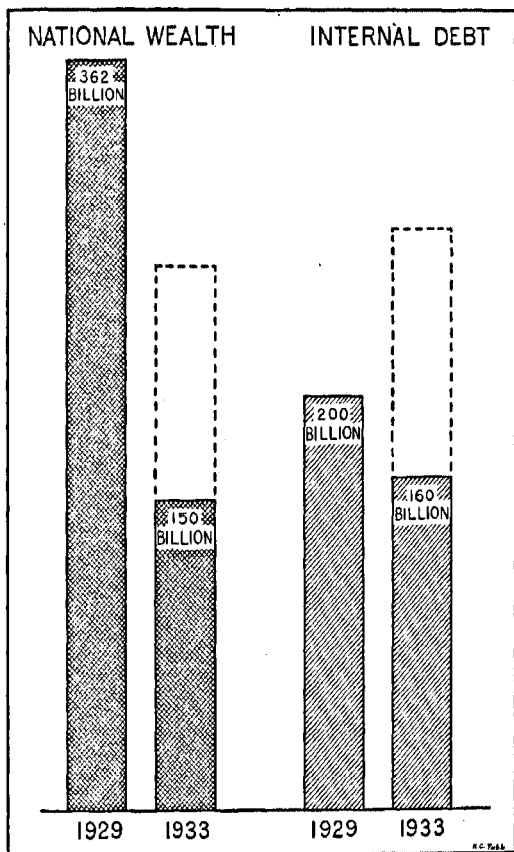


CHART 13. THE FALL OF WEALTH AND RISE OF REAL DEBTS IN THE UNITED STATES, 1929-1933.

The *real* wealth and the *real* debts are shown by the full heights of the four columns (all measured by the 1929 dollar). The *nominal* figures are shown by the shaded portions (using 1929 dollars for 1929, and 1933 dollars for 1933). Real wealth and nominal wealth have both fallen. Nominal debts have fallen a little by liquidation, but real debts have risen a great deal by the swelling of the dollar to \$1.75. The dollar could have been stabilized in 1929 or earlier. It must now be both corrected and stabilized.

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(1) Reflate to the normal; that is, restore the price level to a normal range of business solvency;

or (2) go on liquidating, and thus further deflate the currency, and thus further lower the price level (*i. e.*, swell the dollar), and thus reach complete bankruptcy, starvation and collapse.

This latter is the course which is chosen by those who cry the catch phrase, "Beware of German inflation!"

CHAPTER VII

RECOVERY AND PERMANENCE

REFLATION AND STABILIZATION

THE Constitution of the United States, in Article I, Section 8, Clause 5, empowers Congress to "coin money, regulate the value thereof . . . and fix the standard of weights and measures." These powers, supplemented by arguments from sovereignty and necessity, have been broadly interpreted by the Supreme Court. Certainly they should be broad enough to enable America to bring the dollar up to the level of honesty long since attained by the yardstick. Pursuant to these powers, therefore, two necessities now call for action:

The first is IMMEDIATE REFLATION;

The second, PERMANENT STABILIZATION.

And, if these two policies are to be effectively administered, they should be assigned to a permanent commission, dedicated exclusively to the one office of regulating the currency.

HOW MUCH REFLATION?

There is a whole straggling procession of both debtors and creditors, dating from different points on the trail down from 1920 to 1933. By putting the price level back

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from the 1933 level, we would do injustice to the creditors who lent in 1933. By *not* putting it *all the way back to the 1920 level*, we would do injustice to the debtors who borrowed in 1920. By putting it back, say, to 1926 we would do exact justice to the debtors and the creditors of 1926, but we would leave the debtors on one side of 1926 and the creditors on the other side to suffer something less than justice, according to the respective distances of their contracts from the 1926 price level. Yet we cannot let things alone. In 1933, injustice rests on one group—the debtors. If the price level were put part way back, the injustice would be shared by two groups—debtors and creditors; and this would be the only reasonable solution; for it would minimize the present injustice to both groups taken together. And by restoring the whole mechanism of production and distribution it would help both classes in the long run.

How high, then, shall the reflation go?

Usually, a corrective reflation has taken the form of *de*-flation after the price level has *risen*. Under these circumstances, the correction need not necessarily be very great, because old debts have largely been paid. A rising price level makes it easy to pay. But a falling price level makes it harder and harder to pay, so that after a severe deflation, both the age and the number of the unpaid balances are far greater than after an inflation—and to find the center of gravity of the surviving mass of debts, we have to go further back. Even in the case of an ordinary deflation, the fall is either slow or shallow or both, so that a 10 per cent reflation would be adequate. But in the present instance, the fall has been not only fast and deep but faster and deeper than in any previous case, especially if we count from 1920 (see

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Chart 12). And in fact, the World War left an unusual volume of debts contracted at the 1920 peak; among these, a large proportion are farmers' debts, further aggravated by the fact that the farm price level has fallen since 1920 even more than the average one, shown in the chart. Finally, the resulting situation is now too desperate and ruinous for half way measures. Even to let the price level stand still would actually add to the disaster.

How far back then?

A rough calculation shows that the average dollar of debt now extant was contracted at a price level about 85 to 95 per cent of the 1926 level; that is, about 70 per cent above the level of March 1933, (reckoning this as 55 per cent of the 1926 level). The price level, therefore, so far as justice between debtor and creditor is concerned, should now be lifted to about 70 per cent above the level of March 1933. Certain other considerations, however, respecting raised taxes, freight, public utilities charges, reduction of real income, etc. add to this, so that the ideal level is probably about that of 1926.

IS THERE AN ALTERNATIVE TO LIFTING THE PRICE LEVEL?

Theoretically, there is an alternative. The price level has cheated different debtors in different degrees, and we might, therefore, (theoretically) go about from one debt to another, reducing them according to their respective degrees of illicit growth—that is, reducing the number of dollars of each debt just enough to compensate for the illicit dollar growth (or fall in the price level) which has accumulated during the life of the particular debt, meanwhile allowing the price level to stay where it is.

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But to such a scheme of debt-scaling there are great obstacles. First, it would be an administrative undertaking of mammoth proportions. Second, few creditors would voluntarily consent to it. Third, it would not, after all, do *complete* justice. For instance, one of the great debt categories is bonds, and these change hands every day. If a bond of 1918 changed hands in 1933 and were then paid in the cheap money of 1918, although this would help the debtor who issued the bond (Uncle Sam, for instance, or a railroad) it would hurt the present holder and do nothing whatever for any previous holder.

Nevertheless, we should welcome the new movement for the scaling of certain debts, and for more flexible laws of bankruptcy and foreclosure. Let us scale where we can, to the advantage of trade and of the price level, but above all, let us get on with reflation, to the still greater advantage of the price level—and trade will follow.

BY WHAT MEANS, REFLATION?—GOLD

† A list of the available means of reflation will be found elsewhere.¹ Suffice it here that the essential reflationary methods should deal with the volume of the circulating medium and also with its velocity. And as the volume depends partly on gold, we must be prepared to deal with gold as the occasion demands. It is now in the form of a swollen dollar. That dollar has a swollen purchasing power; and its content may well be reduced to the desired purchasing power, as recommended by Mr. Frank A. Vanderlip and the Committee for the Nation. Such "devaluation" would involve a gold-dollar inflation, the same gold being

¹ In *Booms and Depressions*, Appendix VI and VII.

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split into more dollars. Without this gold-dollar inflation, the inflation of credit alone might leave us with an insufficient gold base, which, under modern international conditions, is subject to many international scrambles.

We might even abandon gold altogether, and resort to a managed currency with no base but paper. Several other nations have done this, to their distinct advantage.

CREDIT REFLATION

At all events, with gold either abandoned or sufficiently inflated, the currency which now rests on gold, should be reflated and managed. This currency is chiefly credit currency—not only the chief currency of the land but also the chief offender in producing the present deflation. It has, in a sense, been managed (and latterly mismanaged) since 1923 by the twelve Federal Reserve Banks, by means of their rediscount rates and open market operations.

REFLATYING THE CONSUMER (STAMP SCRIP)

But a normal amount of credit currency now awaits normal business borrowing; and since, in the present emergency, the business man's courage to borrow is abnormally low, something more than a favorable rate of interest may be necessary to set him to work. What he is waiting for is the welcome sight of customers walking in, and the customers are waiting for business or somebody else to set enough currency in motion to *enable* them to walk in. Therefore the government should find some way of supplying the buying public with such currency. The best way is to help employers to re-employ their discharged labor. This can be done by subsidizing the employer, or by lending him

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money or by guaranteeing him against loss. One of the proposed forms of new buying power is a self-liquidating currency, so constituted as to retire automatically after it has "primed the pump," so to speak, of the credit currency. This is Stamp Scrip,² (so called when used locally, but called "Stamp Money" if used nationally). This form of currency has the additional advantage that it cannot well be hoarded, and is endowed, while it lasts, with more than normal velocity.

This brings us to the question of velocity. The present deflation is two thirds loss of velocity and only one third loss of volume.

THE PROBLEM OF VELOCITY

Since velocity depends on confidence, anything which tends to restore confidence is highly to be desired. Such was intended to be the effect of Mr. Roosevelt's spectacular rescue of the banks by means of the so called bank holiday immediately after he assumed office. Nevertheless, though the rescue of the banks has resulted in a certain amount of unhoarding in the sense of restoring to the banks some of the hoarded gold, the only necessary result is merely to make it easier for the banks to lend; business will not necessarily be encouraged to borrow, nor will the buyer necessarily walk in and furnish the business man with the motive for borrowing. These are the two indispensable conditions to recovery: normal *buying* by the consumer and normal *borrowing* by the producer; and they may still fail to arrive without the help of one or more of the other forms of reflation. It is to help forward the full program of reflation,

² See *Stamp Scrip* by Irving Fisher, Adelphi Co., 1933.

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by justifying the principle of it, that this little volume is submitted.

After reflation, comes stabilization.

A STABILIZATION PARABLE

Once upon a time a chauffeur was driving well; but the half-dozen back-seat drivers, seeing the motion of his hands, cried out "Don't turn that wheel, you fool-inflationist, you'll have us on that embankment—the one on the left there—let Nature do the steering." So the steersman tied his wheel and fell asleep. In due time Nature had done the steering and the car was in the deflation ditch (the one on the right there) not smashed, it is true, but bumping. But the advice of the back-seat drivers was still the same. "See that embankment to the left? A previous driver once got us up there. Don't turn that wheel—Nature got us into this—you can be perfectly sure she will get us out. She's grand, is Nature."

And Nature did get them out, for one of Nature's grandest laws is the law of chance; and chance, one day, jerked the wheel to the left. Soon, therefore, they were on the road again (not without casualties for three were dead from the bumping), but the other three were still solvent and still fond of pretentious words, especially "Nature," as the embodiment of all good. Any form of steering they regarded as disloyalty to Nature. So they still forbade the chauffeur to steer; and, accordingly, after a few rods of smooth going, they were up on the very embankment which it had been the chief object of their lives to avoid.

And in due time they were again in the ditch.

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SWEDEN AND STABILIZATION

Sound money is stable money. We must first reach the middle of the road—that is, reach the maximum escape from the insolvency ditch—and then stay in the road, by means of stabilization. In a word, after steering out of the ditch, we must not quit steering—we must go on making small and almost imperceptible turns of the wheel, instead of big turns. One of the chief monetary illusions is that inflations and deflations must be huge or nothing. But every thing huge has to be small before it is huge. The point is, unless you want it to be huge, you must stop it while it is yet small. The price level is subject to all sorts of influences. Credit varies from day to day, and it registers its variations in the price level *from day to day*. Gold mining varies from day to day, and it registers its variations on the price level from day to day. When the Congress in the year 1837 passed a law opening the mint to all the gold anyone wanted to bring theaceforth and forevermore, it was like a driver letting his wheel entirely alone—except that, in those days there was an excuse, since there was no index of prices to tell the authority in charge of the monetary machine what inflation and deflation were doing to it from day to day—or at least from week to week.

So far as I know, just one nation in the world has made use of its index number for steering purposes. That nation is Sweden. She began in the last of September, 1931. † Since then, for a period of 65 weeks (that is, down to the last report that has reached me) Sweden has maintained a retail price level which has not in any one week fallen more

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than $5\frac{5}{100}$ ths of 1 per cent, nor risen more than $5\frac{2}{100}$ ths; and its biggest cumulative departure from the established norm was $1-7\frac{6}{100}$ ths. This has been no accident. Sweden did it in pursuit of an explicit avowal by the banking committee of the Riksdag, with the concurrence of the Swedish Minister of Finance, who declared for "preserving the internal purchasing power of the Krona"; and in January, 1932, announced with pride how Sweden had proved that prices can be stabilized "within narrow limits." In the *Monthly Review* of the Midland Bank of England (presided over by Reginald McKenna) this demonstration is commended as a great achievement.³

It has been suggested that this action of Sweden's is insincere, having for its purpose merely to keep the Krona down relatively to the sovereign, for purposes of foreign trade; and that the present stabilization policy will be abandoned if the sovereign should fall. I doubt this; but, at any rate, the point remains that Sweden's case has shown the *feasibility* of controlling the price level.

And in Sweden the base was management—there was no gold.

Here is a chart (figure 14) showing not only what Sweden has done since September, 1931, but what the United States of America has *not* done in the same period.

And in America the base was gold—there was essentially no management.

ARE THERE ANY PRECEDENTS FOR REFLATION?

The case of Sweden shows the feasibility of stabilization. Sweden did this without first reflating; but at least she

³ See *Monthly Review* for October, 1932.

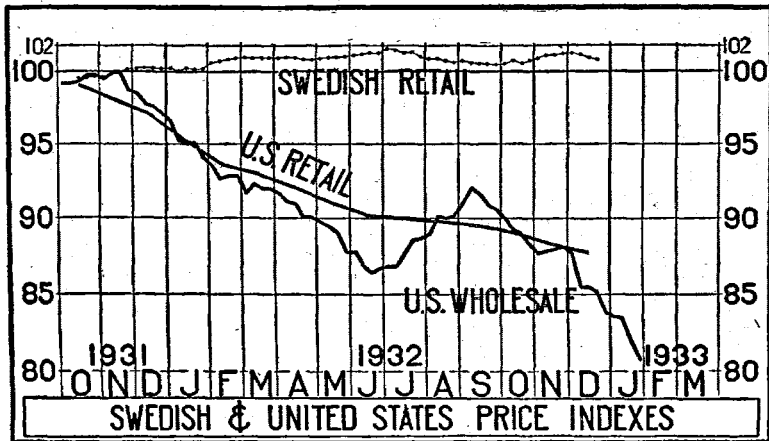


CHART 14. SHOWING SWEDEN'S STABLE PRICE LEVEL COMPARED WITH AMERICA'S UNSTABLE PRICE LEVEL.

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checked the *deflation* which has not been checked in the United States.

But there are precedents for reflation, too. There is a precedent in the recent case of Australia. Also there are some American precedents which appear in Chart 12. Not to speak of the unconscious *re-inflation* of 1896 (effected largely by gold mines) and the unconscious *re-deflation* after 1929, there were conscious or half-conscious *re-deflations* after 1864 (the Civil War) and after 1920, and there was a conscious or half-conscious *re-inflation* in 1922. By 1923, this last showed signs of going too far, and during a part of the period 1923-1928, Benjamin Strong, Governor of the Federal Reserve Board of New York, with the co-operation of the other leading Federal Reserve Banks, checked the rising inflation by means of open market operations. Until his illness in 1927, followed by his death in 1928, Mr. Strong, despite much misunderstanding and resistance, practically dominated the Federal Reserve System. In his own bank, he even succeeded in establishing some traces of a stabilization tradition. But since his death, the other Federal Reserve Banks and the Federal Reserve Board have not followed his efforts; and, in my opinion, it was this failure that, in part, made the boom of 1929 and the present fatal depression.

There was also an attempt at re-inflation in the middle of this depression. You may see, in Chart 14, a brief upturn of America's price level between June and September, 1932. This was the result, I believe, of Mr. Hoover's reflationary program, though he did not call it by that name. It involved "open-market operations" by the Federal Reserve System

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and also a program of loans by Uncle Sam and his agents—loans made to this, that, and the other separate interest, chiefly through the Reconstruction Finance Corporation. The aggregate effect, by whatever name the separate transactions were called, was a certain amount of reflation of bank credit. This collapsed because of the resistance of certain of the Federal Reserve officials, and the weakness or inconstancy of others, and also because of the election, which involved the “campaign of fear.” Some future historian will assemble the full details and assess the fault.

Nevertheless, these two conscious efforts (Mr. Strong’s and Mr. Hoover’s) were not without effect while they lasted; and all the American reflations, whether conscious or unconscious, and whether adequate or inadequate or allowed to run wild, afford precedents for *effective* controls from now on—starting with a reflation to the 1926 level or near it.

THE LATEST PROPOSAL

As this book goes to press, events are rapidly shaping toward the final adoption of a reflationary program of the most thorough-going sort; one which, if carried out, will mark 1933 as perhaps the most important turning point in all economic history. Not only may we expect recovery from depression with a speed unmatched in any previous instance, but (assuming that reflation is to be followed by stabilization) we may expect a new economic epoch characterized by freedom from great depressions, because the monetary unit will be deliberately held constant.

This is an administration and legislative program added to the purely administration embargo in gold which was

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declared the day after Mr. Roosevelt assumed office. It consists principally of entrusting to the President the use of any or all of the following: (1) open market operations, nominally by the Federal Reserve Banks but really controlled by the Government; (2) devaluation of the gold dollar; (3) issue of United States notes in the purchase of United States interest-bearing obligations.

The second of these—devaluation, or lowering the gold content of the dollar—will be equivalent to new discoveries of gold, and on that enlarged base, a larger credit structure can be built, if the gold standard is to be retained. Devaluation will also furnish a natural transition to what I have called a “compensated dollar”⁴—that is, a dollar whose content shall be adjusted from time to time.

⁴ See my *Stabilizing the Dollar*, Macmillan Co., 1920.

CHAPTER VIII

THE IMMORAL MORAL ARGUMENT

ECONOMIC ILLITERACY

AS to that form of reflation which is upward and is, therefore, demanded as the answer to the present deflation, Reginald McKenna, once Chancellor of the British Exchequer and now Chairman of the largest bank in the world (the Midland Bank), said recently (at the annual meeting of his bank): "I confess the thought of inflation, so long as it is controlled, does not alarm me. In these days, the word no longer is a term of reproach."

Neither the self-appointed defenders of "sound money," nor such creditors as demand payment in full, nor such bankers as join in the cry "beware of German inflation" are intentionally immoral. In fact, in each of these three classes there is a growing number who, like Reginald McKenna, favor reflation, though some of them—unlike Mr. McKenna—dare not say so. They dare not because they very properly warned the crowd against the monetary fallacies of the French Revolution and the monetary tragedies of Europe in 1923—and they did the job too well. The crowd was so

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impressed by the word "inflation" that it missed the tune, and the teachers now fear their pupils.

But there are many in all three of these highly respectable teaching classes (creditor, bankers, and self-appointed defenders) who do not themselves know the tune; and in the case of the bankers, self interest, perhaps, complicates the problem of their economic illiteracy. How otherwise account for the paradox that some of them see no harm in "controlled credit expansion," which means the reflation of nine tenths of our currency controlled by bankers, but see treason in the reflation of ten tenths of Uncle Sam's currency by Uncle Sam?

As for the rest of the objectors, they are just plain economic illiterates, still dominated by the money illusion;—still thinking that gold does not change;—still thinking that *upward* is *inherently* wrong, whether it starts at the roof and aims at the sky, or starts in the pit and aims at the threshold;—still thinking that everything upward is uncontrollable because Germany, in a state of ruin and inflation to start with, could not control *her* upwardness;—still unable to see the difference (now taught to college sophomores) between a price and the scale of prices. "It is hard enough," said a banker, high in the Federal Reserve System, "to raise *one* price; how can you expect us to raise *all* prices?"

Answer of a sophomore: "On the contrary, it is easily within our power to raise *the whole level* of Lake Superior by fifty feet, but let's see you raise *one of its waves alone* fifty feet!"

The time is past when expert ignorance can be regarded as even moral.

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THE "MORAL" OPPOSITION

There are those who profess to see immorality in morality, and morality in a "bag of deceitful weights." These say that a man ought to pay what he promised, and that, therefore, there should be no reflation. Reflation would cheat the creditor.

In the first place, those creditors who would lose, would lose on the bankruptcy principle. The Shylock principle was repudiated once for all by this country after the great crisis of 1837, when imprisonment for debt was abolished. We then conceded to the debtor at least the continued possession of his own body. After the crisis of 1873 we went further and allowed him the continued possession of a minimum of property. In the present crisis, we are taking still another step and, in some cases, scaling his debts without the wastefulness of even a bankruptcy proceeding.

But, today, "pay what you promised," really means for many of the surviving debtors, "pay *more* than you promised, and more than your creditor agreed to accept"—more in some cases by 75 per cent.

Even if reflation means some loss to some of the new and recent creditors, it is only such loss as public policy demands when it gives the debtor the relief of bankruptcy. It is only such loss as public policy demands when it blows up private property to save all the property of a prairie town from the tongues of an approaching fire. By these proceedings, no one *really* loses. On the contrary, everyone gains, including those who sacrifice a little in order not to sacrifice everything, including life.

THE MORAL ARGUMENT

THE FIRE APPROACHING

The fire is now approaching—the fire of complete national liquidation and ruin. It is nearer in April, 1933, than it was in February, when the Committee for the Nation published its *Interim Report* cited at the beginning of Chapter II. Having all but consumed the farmer, the workman, and the business man, the fire is now reaching out toward savings banks and insurance companies, for it is beginning to effect the real estate mortgages and railroad bonds on which savings banks and insurance companies so largely depend. (And when the bonds get too low, the law will compel the savings banks to dump them on the market, and bring them lower still.) It is reaching out toward the mortgage-guaranty companies. It is reaching out for the building trades; for, under distress mortgage sales, real estate is so cheap that the building industries of the country are already largely out of a job.

Complete mortgage liquidation would involve years of the slow grind of further deflation, till the bitter end of the vicious spiral is reached. Then the vast network of the building trades would stand close to zero, and the ranks of the unemployed would come close to one hundred per cent. By that time, with hardly a solvent debtor remaining, the creditor, who is already beginning to share in the sufferings of the debtor, would be in a sorry plight indeed. He would begin by doling the rest of us, and end by asking the rest of us for a dole. At best, he would be in the position of a Shylock, who, finds his own flesh bleeding as he draws the blade through the flesh of his victim.

INFLATION?

THE BATTLE

At this writing, the final legislative battle is on: the battle between blind tradition and progress which sees with both eyes; the battle between form and substance; between those whose contract morality clings to the *weight* of the gold as a measure of value and those whose contract morality insists on the *value* of the gold as a measure of value. May the idea that value shall measure value prevail! The immediate stake is great, for at this very moment it is a question of recovery or of continuing the vicious spiral of false liquidation in a plunge to ruin.