



FEBRUARY 1960

# BUSINESS *REVIEW*

**Magnetic Ink and the Paper Mountain**

**Is Monetary Policy Stifling Economic Growth?**

**What Should the Wage of Labor Be?**



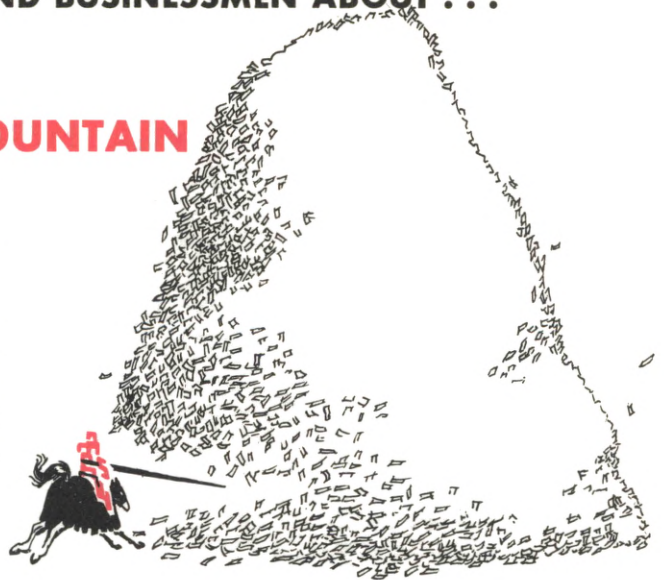
FEDERAL RESERVE BANK OF PHILADELPHIA

## A MESSAGE TO BANKERS AND BUSINESSMEN ABOUT . . .

# MAGNETIC INK AND THE PAPER MOUNTAIN

*The banking system is facing a "check explosion." Banks and businesses now can insure continued efficiency in the handling of checks by printing magnetic ink characters in specified locations on all check forms.*

*Inquiries concerning magnetic ink check imprinting will be welcomed by the Check Department of this Bank.*



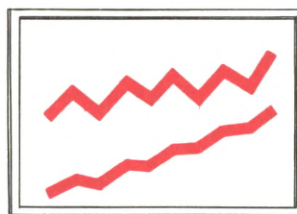
Machines which read characters printed in magnetic ink promise to enable banks to deal with an ever-growing mountain of paper work. Late this year the banking system will begin to realize tangible benefits from the new equipment, as checks begin to clear through pilot installations in several Federal Reserve Banks.

These advances in the mechanization of check handling do not come too soon. This year American banks will handle well over ten billion checks; by 1970 it is expected that number will at least double. Present machines and methods for handling checks cannot cope with so precipitate a growth in volume without increases in costs and serious declines in speed and efficiency. It is fortunate indeed that electronic systems are coming into use that promise to do the job without increasing costs or impairing the expeditious check clearing we now enjoy.

We must have more than machinery, however. Checks have to be imprinted in a language which can be read by the machines which sort the checks, as well as by people. It was the development of such a common machine language that made the new systems possible. The machine language consists of characters and numerals printed in

(Continued on page 15)

# IS MONETARY POLICY STIFLING ECONOMIC GROWTH?\*



In recent years, we have become growth-conscious. The average annual increase in our total output of goods and services in real terms during the past 120 years has been estimated at 3.7 per cent. This means that output doubled every 19 years. For the past 40 years the average annual increase was 3 per cent. This is a remarkable record, but many are apprehensive that our rate of economic growth is not fast enough.

Several developments have contributed to increasing concern about our growth rate. Most important, perhaps, is Mr. Khrushchev's statement that Russia will soon catch us and eventually bury us. This is regarded as a threat to our security. Another development is the postwar rise in the rate of population growth. Economic growth is essential if we are to keep an increasing population fully employed.

Apprehension about our growth rate has focused attention on certain factors influencing growth. "Tight" money, in particular, has come in for criticism. To avoid the alleged retarding effects of credit restraint on growth, some have suggested that we accept slowly rising prices as a necessary cost of a more rapid rate of growth; others have suggested that we maintain low interest rates to encourage investment and resort to

direct controls to prevent rising prices and inflation. These suggestions prescribe some rather strong medicine. Before accepting such ideas we should make a careful diagnosis of the relation of monetary policy to our rate of growth.

My primary purpose is to try to put monetary policy in proper perspective—to show how it fits in with the determinants of our rate of economic growth. To do this one needs to consider some basic questions. What kind of growth are we seeking? What are the more significant determinants of our rate of economic growth? Where do we place a more rapid rate of growth in our scale of economic and social values?

## WHAT KIND OF ECONOMIC GROWTH?

The primary function of any economic system is to produce goods and services for people to consume. In an economy such as ours, production is for the market. The consumer is king. It is the consumer who largely determines the types of goods and services produced. This is quite different from a totalitarian system in which such decisions are made by a few top officials.

We should ever be on guard against permitting the money and credit mechanism to obscure this ultimate function of our economic system.

\* A talk by Clay J. Anderson, Economic Adviser, Federal Reserve Bank of Philadelphia, to the Bank Management Conference, Columbia, Missouri.

Money is a means to an end, not the end itself. Surely, the growth that we seek is in physical quantity of goods and services—not in dollar volume. More money contributes to more goods only to the extent that it brings an increase in physical output. And if we are to have a higher standard of living, we must have an increase in output per capita.

In short, it seems that growth should meet three criteria: an increase in physical output, not just dollars; the mix of goods and services produced to be adjusted to consumer wants; and it should be achieved within the framework of a reasonable degree of economic freedom. As we shall see later, the mix of goods and services *we* choose has a significant influence on our rate of economic growth.

### **WHAT DETERMINES THE RATE OF GROWTH?**

In a market economy, two basic conditions are essential for sustained economic growth. One is an increase in capacity to produce goods and services; the other is a corresponding increase in demand for the goods and services produced. If capacity outstrips demand—or is not geared to the kinds of goods and services people want—idle plants and unemployed workers impede further growth in output and capacity. If demand expands more rapidly than capacity, sooner or later prices rise, anticipatory spending is stimulated, and waste, inefficiency, and speculative activities are encouraged. Sooner or later, too, the boom ends in recession. The inefficiencies and distorted use of resources created by the boom, as well as the unused resources created by recession, are barriers to a sustained and high rate of growth.

#### **Increasing productive capacity**

To increase our total output of goods and serv-

ices, we must either increase the number of hours worked or produce more per hour. There is no other way.

The number of hours devoted to production can be increased by enlarging the labor force, or by the same size labor force working more hours. The size of the labor force usually expands as population increases; it may also be enlarged by a larger proportion of the population being in the labor force. But gains in output per capita are more likely to result from increases in the average number of hours worked and in the proportion of the population employed.

Improved productivity—more output per man-hour—is one of the more promising ways of increasing our total production of goods and services. Many factors influence productivity. Only a few of the more significant ones will be mentioned here.

The quality and efficiency of the labor force have an important influence on productivity. Output per man-hour may vary widely among employees doing the same type of work even though equipment and working conditions are identical. Some are more skillful than others, and some are more diligent than others in using their skills. In part, skill may be something we are born with, but it can be improved by education, training, and experience. Diligence in using skill is influenced by a host of things, such as incentives, working conditions, union regulations, intensity of desire for the goods that more income will buy, attitudes toward the job, and home environment.

A country's stock of plant, machinery, and equipment—quantity and quality—is a second major factor influencing productivity. With primitive tools even the hardest labor yields only a meager output. The quantity and the

quality of the machinery and equipment we have to work with are one of the principal reasons for the high productivity and the high standard of living in the United States.

Research is a third factor contributing to an increase in productivity. Basic research pushes back the frontiers of knowledge and provides the foundation for applied research and improved technology. Our scientific and research laboratories are a principal source of innovations—new products, new machines, and improved productive processes.

If the improved technology made possible by discoveries and innovations is to be fruitful, it requires substantial sums for new plant and equipment. The volume of saving and investment is a fourth major influence on productivity. We can't consume all that is produced and add to our plant and equipment. Saving reduces consumption, and releases resources which, by way of investment, are used to increase productive capacity. We should not permit any illusion about money and credit to obscure this essential role of saving and investment. Money contributes only to the extent that it facilitates the saving-investment process. The proportion of our resources devoted to investment is a significant determinant of the rate of economic growth.

The work of the entrepreneur is a fifth factor that has a significant influence on productivity. He performs the essential function of bringing together and coordinating the use of labor, materials, plant and equipment in the actual production of goods and services. Management makes the decision whether to invest or not to invest, and managerial policies toward employees affect worker morale and efficiency.

Mobility of resources is a sixth factor. In a free economy, the product mix is continually being altered by changing wants and the develop-

ment of new products. A growing economy is dynamic—some industries expanding, others declining. Anything which delays the shifting of workers and productive facilities from declining to growing industries tends to prolong unemployment and idle plant facilities. Delay in introducing improved machines and more efficient methods of production retards an increase in productivity. Mobility of resources and the prompt adoption of more efficient methods of production thus contribute to productivity and a higher rate of economic growth.

### **Balance between capacity and demand**

For many years, economists stressed the fact that production creates its own demand—that is, turns out enough purchasing power to buy back all of the goods and services produced. More recently the trend has been toward the reverse—spending creates its own output.

Neither of these generalizations is necessarily true. Production does create enough purchasing power to buy all that is produced, and obviously we cannot buy more than is produced. But total spending and total output may temporarily get out of balance. One reason for this is the use of credit, i.e., the spending of tomorrow's income for today's purchases. Credit expansion may cause total demand to rise beyond capacity to produce. When demand presses against capacity to produce there is a tendency for prices to rise, which in turn tends to generate an unsustainable boom. On the other hand, credit contraction—the use of today's income to pay for yesterday's purchases—may drag total demand below capacity, resulting in a decrease in production, employment, and income. Too much demand tends to generate rising prices and an unsustainable boom; too little demand brings on recession, unemployment, and unused resources.

Sustained economic growth requires that total demand be geared closely to the rise in total output.

### ROLE OF MONETARY POLICY

There are two principal avenues through which monetary policy may contribute to economic growth.

Monetary policy has a primary responsibility to help keep total money demand in balance with capacity to produce. This means that monetary policy should be flexible. It should restrict credit expansion when total demand threatens to raise prices and generate an unsustainable boom; it should make credit readily available and encourage expansion when a deficiency in total demand is causing a decline in production and employment. In other words, monetary policy can contribute to economic growth by helping to maintain price stability and a reasonably full use of productive resources.

A second and related channel through which monetary policy may influence growth is in helping to provide an environment favorable to saving and investment. Experience demonstrates clearly that people are reluctant to save money that is expected to depreciate in value. Price stability encourages saving which is the principal source of funds for financing research and improved plant and equipment. Price and business stability, by creating confidence in the future, encourage a high level of investment. Monetary policy thus contributes to growth by: (a) helping to iron out upward and downward swings in prices and total business activity, and (b) providing an economic environment favorable to a high level of saving and investment.

Now let us turn for a moment to the "tight money policy" that some people fear is stifling economic growth. The Federal Reserve is pur-

suating a policy of restraint. The objective is to prevent total money demand from rising too rapidly; for if it does, the result is likely to be another upturn in the price-wage spiral and the development of an unsustainable boom. What the Federal Reserve is striving for is a sustained rise in total output and employment rather than recurring booms and recessions. I believe that striving for sustained growth will result in a higher average annual rate of increase than will a policy of permitting booms and recessions to produce wide upward and downward swings in total output and employment.

Monetary restraint has been criticized on the ground that it retards business expansion and absorption of the unemployed. It is true that the percentage of our labor force unemployed is still somewhat above the postwar average. But would an easier money policy solve the unemployment problem? Available evidence suggests that a deficiency of total money demand is not the primary cause. A recent study of unemployment during the period 1955–1957, made by the United States Department of Labor, found that approximately one-half of the unemployment resulted from frictional causes such as the continuing entry of new workers most of whom soon found jobs, voluntary shifting from one job to another, and seasonal fluctuations in employment. Shifts in demand, improved technology which enables the same amount of goods to be produced with fewer workers, the relocation of industry, and other structural changes temporarily displace workers. Such changes together with a rather high degree of immobility of labor have created pockets of chronic unemployment.

Easier money is not a remedy for these types of unemployment. It would not reduce seasonal fluctuations in employment, cause people to burn

coal instead of oil, or shift workers and plant facilities from one type of production to another. Monetary policy can only facilitate adjustment to such shifts—shifts which are characteristic of a dynamic economy—by helping to maintain stability and sustained growth.

An easy money policy might for a short time accelerate somewhat the rate of increase in real output. But such a policy would involve serious risks. I doubt that those who urge easy credit at low rates until our resources are *fully* utilized would, for example, instruct the driver of their automobile to hold his foot on the accelerator until he reaches the stop sign. Neither is it advisable to pursue an easy money policy right up to the point where resources are fully utilized. To do so would likely result either in rising prices and the development of an unsustainable boom; or to avoid the boom, restraint would have to be applied so drastically that it might precipitate a recession. Easy money too long maintained sows the seeds of another recession. Gradual pressure on the credit brake as total demand approaches a reasonably full use of resources is a much more promising way of preventing an unsustainable boom and, in turn, of diminishing the severity of a subsequent recession. Monetary policy alone cannot eliminate booms and recessions, but it can significantly reduce their intensity.

#### **OTHER POLICIES AFFECTING GROWTH**

When one considers the range of influential forces—total demand geared to productive capacity, size and efficiency of the labor force, the composition of output, especially as between consumption and investment, the role of management, the mobility of resources—it is apparent that many policies other than monetary policy affect the rate of economic growth.

Keeping total demand in balance with total production is a primary responsibility of monetary policy. But fiscal and debt management policies also play significant roles. A deficit in the federal budget tends to put more funds in the hands of the people and increase total demand; a surplus absorbs spendable funds and reduces demand. Fiscal and debt management policies can either contribute significantly to keeping demand and productive capacity in balance or they can make the role of monetary policy more difficult or even impossible.

The productivity of labor—ignoring for the moment the machinery and equipment labor has to work with—is influenced by many things. A simple one that was impressed upon me when I lived for a while in an underdeveloped country is the intensity of one's desire for goods and services to consume. I recall, too, the reply of a high West German official when I asked him to what he attributed West Germany's remarkable progress in the postwar period. He said, without hesitation, "The people wanted many things they had been compelled to do without, and they were willing to work hard to get them." Health, nutrition, and climate are other factors.

Education and training are becoming increasingly important as professional, semi-professional, and highly skilled jobs constitute a growing proportion of the total. Yet, there seems to be general agreement that there is a serious shortage of qualified teachers and educational facilities. Reports indicate that Russia is placing great emphasis on the education of scientists, mathematicians, engineers, and technicians. Moreover, the high esteem in which these professions are held is a strong incentive for young people to choose them.

Another important influence is worker morale. Wars and emergencies indicate what we can do

when we really put "our shoulders to the wheel." That most of us work considerably below our capacity, I believe few would deny. To find incentives and to achieve a morale that will lift the output of people engaged in economic pursuits closer to their potential capacities present an opportunity and a challenge. Employer-employee relations, wage and salary administration, and personnel policies are among the policies that have an important influence in this area.

Despite the high level of investment in the postwar period, substantial sums are needed to modernize our business plant and equipment. One study shows that the average age of our business plant is 24 years, and the average age of equipment is approximately nine years. In terms of 1959 prices, over \$140 billion would be required to replace plants over 30 years old, and over \$110 billion to replace equipment over 10 years old. If old and obsolete plants and equipment could be replaced with the more modern ones that research and technological progress have made possible, the result would surely be a sizable increase in productivity.

Russia's economic challenge is not so much in terms of growth in total output as in the amounts being devoted to research and investment. It has been estimated that industrial investment takes 21 per cent of Russia's total output of goods and services as compared with 9 per cent in the United States. As a result of this emphasis, Russia, with a total output 40 per cent of ours, invests 90 per cent as much in industrial plant and equipment. The high proportion of output devoted to investment probably reflects, in part, the fact that Russia has just moved into the industrial stage; it reflects also a determination of that country's leaders to expand industrial capacity even though requiring

great sacrifices in terms of consumption goods.

In a totalitarian system, such as Russia's, the division of output between investment and consumption goods is determined by those in charge of economic planning. In a free economy, such as ours, the choice ultimately resides with the people. Spending, in effect, is casting dollar votes for production of the goods and services we purchase. If we spend practically all of our income for consumption, then nearly all of our resources will be used to produce consumer goods and only a small amount will be devoted to the production of capital goods and an increase in our productive capacity. Maybe we need an advertising campaign to promote saving and make businessmen unhappy with obsolete plant and equipment, instead of one to make consumers dissatisfied with last year's model even though functionally it may still be as good as a new model.

Many policies other than monetary policy influence saving and the allocation of resources between consumption and investment. Tax policies in particular affect incentives both to save and to invest. Policies designed to stimulate both saving and investment are one of the more promising avenues to increased productivity and a more rapid rate of growth.

Mobility of resources contributes to a high rate of growth in a dynamic economy. Laborers and resources idled by production shifts from goods in less demand to those in greater demand will remain unused longer the less their mobility. Pockets of chronic unemployment in hard coal, textile, and similar centers are a stark reminder that labor does not shift readily from declining to expanding industries. The farm price support program and similar "prop-up" policies retard the shifting of resources in accordance with human wants. Monopolistic power dulls the incentive for



efficiency that derives from competition, and sometimes enables producers to delay the introduction of newer, more efficient techniques and equipment in order to protect existing investments.

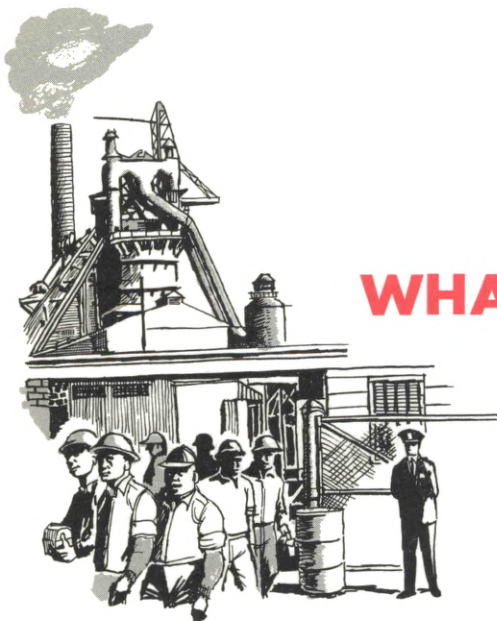
### CONCLUDING REMARKS

It would be unfortunate if preoccupation with “tight” money should divert attention from the fundamental factors influencing economic growth. The role of monetary policy is chiefly one of helping to maintain an economic environment conducive to growth; it is not an important motive force determining the rate of increase in productivity and our capacity to produce. The current policy of restraint instead of stifling growth is stifling the development of inflation and an unsustainable boom both of which are

inimical to sustained growth.

Economic growth is not unique in that it can be achieved without giving up something in return. It carries a price tag. Our growth rate is determined largely by our scale of values—of how we choose among such basic alternatives as more work or more leisure, diligence or indifference in applying our talents to the job at hand, using more of our resources for research and investment or more for consumption, and policies that promote or policies that impair efficiency and productivity.

In a totalitarian system, these decisions are made by a few top officials in charge of economic planning. A free economic society affords us the privilege of making the decisions; and it also places squarely on us responsibility for the results.



*The steel strike is settled and fast becoming just another historical dip in our index of industrial production. But the basic question it raised is far from answered.*

## WHAT SHOULD THE WAGE OF LABOR BE?

Ever since some men began working for others in return for a money wage, there have been disagreements over the amount. Perhaps disagreement isn't a strong enough word. Throughout the world the issue of wages has provoked men to anger, violence, cruelty, and revolution, as well as work stoppages and peaceful picketing.

In the United States today there seems to be widespread dissatisfaction with wage disputes that idle key industries for long periods. Our society doesn't like running on four cylinders when it seems awfully important to get the maximum performance out of all eight. This strike is settled—fine. But what should the wage of labor be anyway? And can't it be arrived at with a little less sound and fury?

This article will not answer these compelling questions. Frankly we don't know anyone who has the answers. But we do know the questions aren't

novel. Over the course of time people have periodically grown uncomfortable with the level of wages and how they were set. Other societies in other times have asked these same questions.

Scholars have spent long years reflecting on them and innumerable hours in research before coming up with answers. Others have had answers ready and waiting. All were trying to meet the labor problems of their day. Many published their ideas widely, propagandized and agitated for change. Many of these ideas have helped shape our current attitudes and laws. Many of them are still knocking about in the press, on television and radio, in the halls of Congress, and on the streets of Pittsburgh.

If, today, idle men, damped furnaces, and smokeless chimneys demand a new approach, it is absolutely necessary to know how the old approach developed. The past won't tell us what

the wage of labor should be, but it will help us clear the underbrush of old worn-out answers that were, at best, passing-good when they were formulated and which are of little use now.

### WAGES IN THE MIDDLE AGES

The past begins, for our purposes, in the Middle Ages—that dim, overcast period that stretches about a thousand years from the collapse of the Roman Empire to the great discoveries of Columbus and Vasco da Gama.

We don't have to pause here long. There is no burning wage issue because there is only a small wage-earning class. There is no industrial warfare to speak of because there is no industry to speak of.

There is, however, an idea. It's promulgated by the scholars of the Church—Thomas Aquinas, and others. The Church is the one international influence that pervades the everyday activities of baron and serf, peddler and tradesman.

The idea is simply this: It's right for a man to seek the wealth he needs to maintain his customary station in life. To seek more, however, is avarice, and avarice is a deadly sin. A *just* price and a *just* wage permit the seller, be he merchant or craftsman, to maintain his customary station in life. "Give me neither riches nor poverty," said the Book of Proverbs, "but enough for my sustenance."

Thus the conclusion: prices and wages should be fixed by public officials with a view toward justice. This was no more than any energetic mayor would happily do before breakfast.

### THE COMMERCIAL REVOLUTION

The feudal society of the Middle Ages gradually faded before the growing power of kings and merchants for whom the discoveries of America and sea routes to the Far East opened unbeliev-

able commercial possibilities. The distinctive feature of the sixteenth through eighteenth centuries was the growth of commerce. This was accompanied by the growth of new economic ideas known as mercantilism.

The mercantilist pamphleteers dealt with a very modern objective—economic growth. They believed the economic growth of a nation depended on its ability to bring about an inflow of gold; and they knew that a country could do this by exporting more goods than it imported. To promote an inflow of gold they recommended, lobbied for and to a certain extent successfully achieved a planned economy.

Working people were of central significance in their plans. They argued that a low wage increased the worker's contribution to national wealth. A high wage, they believed, would induce the worker to spend some of his time in idleness; it would also increase costs of production and weaken the competitive position of the nation in international trade. They concluded that the government should generally administer wages at levels just high enough to permit the worker to maintain his health and raise a family—future workers.

Many in Europe and its possessions chafed under the harsh mercantilist restraints—none more, we might add, than the Englishmen in the thirteen original colonies.

### THE FREE MARKET

1776 was a momentous year. A statesman in Philadelphia wrote the Declaration of Independence; a practical engineer at Soho near Birmingham constructed the first successful steam engine; a scholar residing in Kirkcaldy, Scotland published *An Inquiry Into the Nature and Causes of the Wealth of Nations*.

Adam Smith wanted exactly the same thing

as the mercantilists—economic growth. But he advocated exactly opposite ways of achieving it. His policies for increasing the wealth of nations can be summed up in two words—*laissez faire*.

Smith, it has been said, saw a Scotsman inside everybody—a person who could shrewdly decide how to best pursue his economic ambition. He wanted to give this inner-man free reign, and argued that each man, pursuing his own self interest, “is led by an invisible hand to promote an end (economic growth) which was no part of his intention.” Smith’s “invisible hand” was free, competitive markets.

Smith didn’t take it upon himself to say what the wage of labor *should* be. He contented himself with saying that wages should be determined competitively. As the wealth of nations increased, he visualized real wages rising also.

Smith called the turn in 1776; and the economies of the Western World, rolling along at high speeds, went screeching around it on two wheels. But once the turn was made, many of Smith’s expositors and supporters forgot what had been around the corner. They began to assume that free markets were natural and permanent; and they found it hard to conceive of any other way of organizing economic activity.

As a result they developed some pretty stiff-collared ideas about wages and also a belief that all attempts by governments and trade unions to improve the lot of the workingman were doomed to failure.

David Ricardo, wealthy financier, landowner, and member of Parliament—master of long chains of deductive thinking and intricate sentence structure, set the tone:

“The natural price of labour is that . . . which is necessary to enable the labourers . . . to subsist and perpetuate their race, without either increase or diminu-

tion. . . . However much the market price of labour may deviate from its natural price, it has . . . a tendency to conform to it.”

Others took up the theme: the total amount of wages, they argued, is fixed by the amount of savings already accumulated for the purpose of paying wages—a wage fund. If workers or governments are temporarily successful in forcing up wages, profits will fall, saving will be discouraged, and the wage fund—the demand for labor—reduced. Moreover, temporarily higher wages will encourage working people to marry earlier and raise more children. This will increase the supply of labor. A decrease in demand and an increase in supply will automatically reduce wages to their natural level—subsistence.

“Against these barriers,” said the prominent economist J. E. Cairnes in 1874, “trade unions must dash themselves in vain. They are not to be broken through or eluded by any combination however universal; for they are the barriers set by Nature herself.”

## WAGES AND PRODUCTIVITY

It wasn’t until the latter part of the nineteenth century that an earlier idea—forgotten for 50 years—was revived by the American economist, John Bates Clark. With careful logic he showed that the wage of labor under competitive conditions is related to the productive contribution of the individual worker. Now this seemed reasonable in a fast-growing industrial economy. To many, including Clark, it seemed not only reasonable but eminently fair and just.

However, the phrase “under competitive conditions” was one fly in this particular ointment. It’s one thing to argue that a just wage is determined by competition when the worker

is a journeyman and the employer a master craftsman. It's quite another thing when the employer is a large, impersonal corporation.

Adam Smith had seen that *laissez faire* could not work when some had more economic power than others. He had bet everything on competition and he had boiled over at monopoly. John Bates Clark, moved by the same feelings, became a vigorous opponent of both business and labor practices that limited competition.

### A BARGAINED WAGE

Competition, however, did not present an altogether rosy picture in an imperfect world. Careful observers of actual conditions such as John R. Commons in the United States and Sidney and Beatrice Webb in England argued effectively for labor laws to protect the individual worker from fierce rivalry among employers to lower costs—child labor, women's hours, industrial safety laws, and others.

These writers also pointed out that the individual worker is at an inevitable disadvantage when bargaining with a large business. A business may not lose any income when it loses a worker; a worker generally loses all income when he loses a job.

At the time, however, collective bargaining was under a legal cloud. Labor unions could be prosecuted as illegal conspiracies; and, in the United States, under the antitrust laws as well. In addition, employers could easily obtain injunctions against strikes to prevent "irreparable damage" to their businesses.

Big markets and big technology seemed to demand big business. John R. Commons and the Webbs recommended that workers be permitted to organize to enable them to bargain with management on an equal footing. Big labor was just a step behind; and sometimes a step ahead.

### OLD IDEAS AND NEW

Today, both management and labor agree that the wage of labor should be just—as did the medieval schoolmen. "The men who make steel," the United Steelworkers said this past July, "want . . . fair wages, a just share of the industry's wealth. . . ." Industry spokesmen responded that they also wanted only a fair share for their stockholders. To the nation's regret, labor and industry could not agree on a definition of "fair."

The old definitions certainly don't help much. We cannot say in 1960 A.D. that the wage of labor should be only enough to permit each man to maintain his station in life. Nor can we say it should be only enough to permit the worker to sustain his health and raise a family. The modern economist finds attempts to define "fairness" complicated, if not impossible; he has retreated from earlier attempts to picture any particular wage as just.

The truth of the matter is, that we cannot say *what* the wage of labor should be without saying *why* it should be. Our ideas of "fairness" are inevitably related to our objectives. In 1960 A.D., from the public's point of view, there are certain limits to a "fair wage."

In the past two decades rising prices have inflicted hardships on large groups of people in the United States. Today, many people feel a wage so high that it pushes up costs and prices is an unfair wage. On the other hand, in any depression, with men out of work and resources going to waste, a wage so low as to drastically curtail consumption similarly would be unfair.

Collective bargaining, some have pointed out, may produce a fair wage within these limits; but perhaps only at a very high cost. We have equalized bargaining power in many important industries and permitted both labor and manage-

ment sufficient economic power to hold out for long periods. When the giant steel industry and the giant steelworkers' union disagree about the wage of labor, the prosperity of the economy and the security of the nation can be put in jeopardy.

The pat answers of the past don't tell us how to procure fair wages at a minimum cost—but they do tell us how not to. The mercantilists, with their direct controls, made a good many people miserable in sacrificing individual welfare to what they believed was national expediency; after 180 years of relatively free markets, a planned economy would no doubt be misery compounded. On the other hand, the labor market competition of the late nineteenth century seems no more desirable today than do mercantilist-type controls. Both detailed regulation and intensive competition have been tried and found wanting. Neither has filled the bill as handmaiden to the public interest in labor markets.

Yet the public does have a legitimate concern with wages and how they are set; wage policies of management and unions can sometimes conflict with public interest. Somehow, it is clear, the public concern must make itself known and effective.

Many have expressed dissatisfaction over the recent steel strike settlement. Yet the *way* the settlement came about is particularly interesting. From mediation, to fact-finding studies, to inquiry boards, to direct intervention by public representatives in high office—the public's concern was presented first in one way then in another. It seems, we are currently passing through a period of trial and error—groping at alternatives. It is conceivable that historians 100 years from now will look back on the steel settlement of 1960 and mark it as one of the key events in the reshaping of collective bargaining to meet the problems of our day.



(Continued from Page 2)

ink which contains particles of iron oxide. As checks imprinted with this ink enter one of the new sorting systems, they go through a device which magnetizes the ink. Then they pass a reading head which reads the magnetized characters. A computer performs the necessary listing and arithmetic operations, controls the high-speed sorting of the checks, and feeds a high-speed printer which prints out the required records at rates up to 900 lines per minute.

With such systems, we can conquer the paper mountain. But it won't happen until the checks going through the collection system are imprinted with the proper characters in magnetic ink, in the proper space. That space, set aside by agreement among the American Bankers Association, office equipment manufacturers, and the check printers of the country, extends five-eighths of an inch up from the bottom edge of the check. In it a specific location is provided for the routing symbol and transit number which now appear at the upper right of every check. The fact that these numbers are known and can be imprinted in advance is what makes it possible to have check-handling systems which accept checks directly, with no necessity for time-consuming and costly preparatory processing.

Banking this year can take a long step forward toward keeping pace with the growing demands of commerce and industry, if only each bank will print its routing symbol-transit number in magnetic ink in the proper place on its check forms, and insure that its customers who use specially designed forms do the same.

Questions naturally arise when organizations are requested to put magnetic ink characters on

check forms. One has to do with costs. Costs of magnetic ink check imprinting are negligibly higher than for present methods. There may be an additional cost at the time of changeover, if check forms must be redesigned to free space for the magnetic ink imprinting. This cost, however, is non-recurring, and when allocated to quantities of checks should not be large per check.

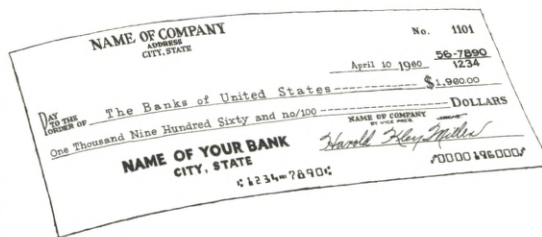
A more general question concerns the benefits to be expected by the individual bank or business which puts magnetic ink characters on its checks

but does not expect to install any of the compatible accounting equipment which accepts input data in magnetic ink. The benefit to these organizations must be expressed in terms of the system of which they are a part. Accurate

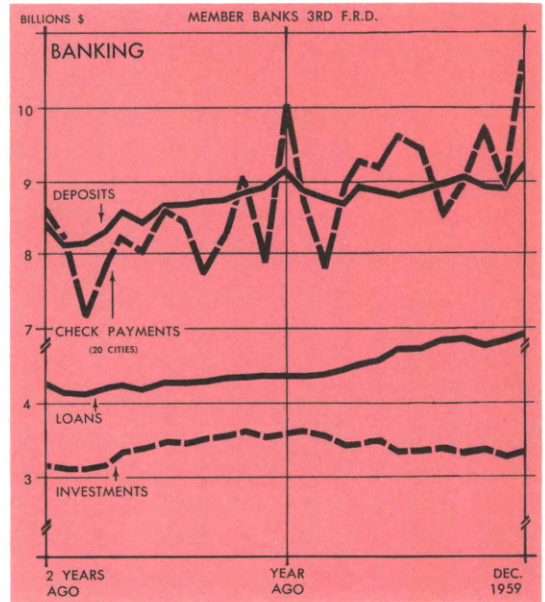
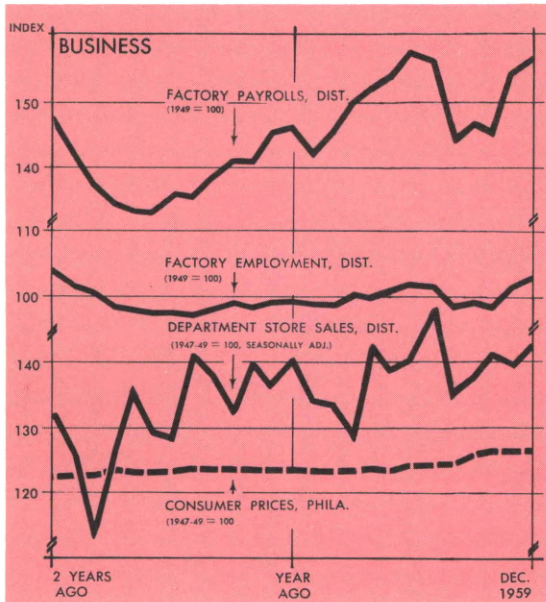
and fast check handling at present costs cannot long continue without automation. Magnetic ink encoding makes automation possible. If banks and their customers are to continue to have efficient handling of checks, magnetic ink encoding is a necessity.

Banks have received Bank Management Publication 147 of the American Bankers Association, *The Common Machine Language for Mechanized Check Handling*. It contains a complete account of the program and explains the new check forms. Copies can be obtained for \$1.00 from the American Bankers Association, 12 East 36th Street, New York 16, New York. Firms which stock their own check forms should consult their banks concerning magnetic ink printing and the possibility that some redesign of check forms may be necessary in order to clear the space set aside for the machine language symbols.

### THE CHECK OF 1960



# FOR THE RECORD...



SUMMARY	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	Dec. 1959 from		12 mos. 1959 from year ago	Dec. 1959 from		12 mos. 1959 from year ago
	mo. ago	year ago		mo. ago	year ago	
<b>OUTPUT</b>						
Manufacturing production.....	+1	+2	+4	+3	+10	+14
Construction contracts ...	+18	+11	0	-6	-3	+3
Coal mining .....	+5	-7	-5	+2	0	+1
<b>EMPLOYMENT AND INCOME</b>						
Factory employment (Total).....	+1	+3	+2	+1	+4	+4
Factory wage income.....	+2	+7	+9	....	....	....
<b>TRADE*</b>						
Department store sales ...	+2	+2	+4	+3	+4	+7
Department store stocks ...	+2	+6	....	+1	+7	....
<b>BANKING</b> (All member banks)						
Deposits .....	+4	+1	+4	+3	0	+3
Loans .....	+2	+13	+9	+2	+14	+11
Investments .....	+2	-7	-1	0	-11	-2
U.S. Govt. securities.....	+2	-9	-1	0	-14	-4
Other .....	0	-3	+1	+1	-1	+4
Check payments .....	+18†	+5†	+11†	+20	+9	+10
<b>PRICES</b>						
Wholesale .....	....	....	....	0	0	0
Consumer .....	0†	+2†	+1†	0	+1	+1

\*Adjusted for seasonal variation. †20 Cities †Philadelphia

LOCAL CHANGES	Factory*				Department Store†				Check Payments	
	Employment		Payrolls		Sales		Stocks		Per cent change	
	Per cent change Dec. 1959 from		Per cent change Dec. 1959 from		Per cent change Dec. 1959 from		Per cent change Dec. 1959 from		Per cent change Dec. 1959 from	
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago
Lehigh Valley..	0	+3	+1	+12	....	....	....	....	+9	+5
Harrisburg ...	+2	+9	+1	+23	....	....	....	....	+15	+2
Lancaster ....	0	+4	-3	+2	+6	+6	+3	+7	+9	+4
Philadelphia ..	0	+3	+1	+8	+3	+1	+3	+7	+19	+5
Reading .....	+3	+4	+2	+8	+5	0	+3	+7	+16	-1
Scranton .....	0	-2	-2	+1	+1	0	+3	+3	+9	-8
Trenton .....	+9	+9	+19	+18	+3	+4	-6	+5	0	-4
Wilkes-Barre ..	-1	+7	-3	+8	0	+2	+3	+13	+12	-1
Wilmington ..	-2	-5	+1	+2	0	+3	+1	+6	+44	+18
York .....	+1	+1	0	+2	+1	-1	-1	+4	+14	+11

\*Not restricted to corporate limits of cities but covers areas of one or more counties. †Adjusted for seasonal variation.