

FEBRUARY 1962

# BUSINESS REVIEW

Silver: Physics and Folklore

Capital Spending—Green Light Under Yellow

The New Four Percenters

Rounding the Horn of Plenty



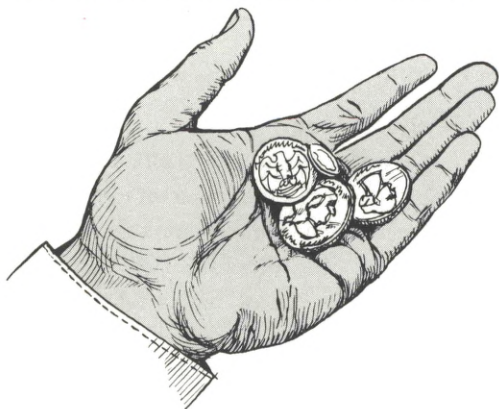
FEDERAL RESERVE BANK OF PHILADELPHIA

## BUSINESS REVIEW

is produced in the Department of Research. J. C. Rothwell was primarily responsible for the article "Silver: Physics and Folklore," Bertram W. Zumeta for "Capital Spending—Green Light Under Yellow," Lawrence C. Murdoch for "The New Four Percenters," and Evan B. Alderfer for "Rounding the Horn of Plenty." The authors will be glad to receive comments on their articles.

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*Silver is a metal much in the news. President Kennedy has directed the Treasury to halt silver sales and is seeking Congressional approval to hold future silver purchases within discretionary limits at flexible prices. In so doing, he hopes to clarify United States silver policy which through the years has often been a curious amalgum of . . .*



## PHYSICS AND FOLKLORE

Physically, silver makes an ideal money metal. Properly alloyed, it is tough, resists abrasion, and carries a high and lustrous polish. It is not so heavy as to be a burden in the pocket, yet it is heavy enough so that its presence is felt, its absence missed.

But the physical characteristics of silver have been only one factor of importance in shaping United States silver policy. Today, as in much of our past history, the United States Treasury is required to buy silver when offered by domestic miners even though it may not *need* the metal for coinage—for turning out dimes, quarters, and halves.

The reason for this seemingly anomalous situation lies deeply embedded in our nation's past. For through much of our history, silver has been more than a metal to be turned into coin. At times it has even become a part of American folklore—an issue arousing strong popular sentiment and emotion. But why the appeal of silver? And how does our past experience help explain why the Treasury is still required to buy silver it may not need for coinage? To answer these questions

we must turn back the pages of American monetary history.

### THE MAZE OF MONETARY HISTORY

Accompanied by a small cavalry guard, a Congressional Committee, and a cheering horde of citizens, General George Washington rode through the streets of New York City shortly after noon on April 30, 1789. His destination was the new Federal Hall in Wall Street where, on the balcony of the building facing Broad Street, he took the oath of office as the first President of the United States.

A wealth of problems faced Washington and the new government after the last cheer of the inaugural celebration had died away and the last toast was drunk. Ahead lay the formulation and passage of the countless laws and policies contemplated by the drafters of the Constitution.

Not the least of these tasks was that of establishing a money system—a coherent system to take the place of the hodgepodge of Continental currency, British pounds sterling, Spanish milled dollars, and the like, which served our nation as



media of exchange. The job of planning such a system and making recommendations to Congress was delegated by President Washington to his brilliant young Secretary of the Treasury, Alexander Hamilton.

Hamilton took on the task with his usual vigor and efficiency. After much hard digging, he recommended to Congress that the dollar be chosen as the unit of account and that a system of bimetalism be established in which both silver and gold coins could be freely coined at the mint and would circulate at an exchange ratio of 15 to 1. In justifying his recommendation of bimetalism, Hamilton commented as follows in his famed report on the establishment of a mint and coinage system for the United States.

To annul the use of either of the metals as money, is to abridge the quantity of circulating medium, and is liable to all the objections which arise from a comparison of the benefits of a full, with the evils of a scanty, circulation.

But bimetalism did not work out quite so well as Hamilton had hoped. The reason: one or the other of the money metals was constantly being driven out of circulation—leaving us in fact on an alternating monometallic standard.

The catch was that the *legal* ratio of exchange (15 to 1 and later 16 to 1) often deviated from the ratio at which gold could be exchanged for silver in this country and abroad. If the forces of supply and demand in the arts and industries or if the ratio prevailing in other countries should put a higher value on gold (say 16 to 1) than its mint value (say 15 to 1), owners of \$1,000 of gold coin could melt coin into bullion and sell it on the market for silver, which could be coined at the mint into about \$1,060. The cheaper metal (silver) would soon drive the dearer metal

(gold) out of circulation. First one, then the other metal ceased to circulate as values shifted in accordance with market forces of supply and demand. From 1792 to 1834 we were in effect on a silver standard. Then from 1834 to 1861 we were on a *de facto* gold standard.

### The appeal of silver

During the Civil War, we were actually on a paper standard. But the silver issue was soon to be heard from again, to a large extent because of what happened during and after the war.

During the war prices of industrial products and farm commodities skyrocketed. Part of the increase stemmed from the natural rise in demand for goods accompanying full-scale military mobilization. More pressure on prices resulted from the manufacture of paper money to finance expenditures. Almost \$450 million in “greenbacks” were issued during the hostilities, so that greenbacks became almost half the total amount of currency in circulation. With this vastly increased money supply pursuing a limited amount of goods, prices soared.

In response to rising prices, manufacturers and farmers expanded their production facilities. New factories went up by the score. Thousands of acres of virgin soil made available by the Homestead Act felt the sharp cutting edge of the plow. It seemed to many as if prosperity was here to stay. Yet, shortly after Appomattox, business conditions changed for the worse. Prosperity gave way to depression and then to prolonged price deflation.

Three factors primarily were responsible for the price deflation following the Civil War. First of all, there were great problems in shifting industrial production from war to a peacetime basis. Almost inevitably there were layoffs, leading to declines in income, spending and prices.

Second, the expansion in agricultural production geared to a wartime economy outstripped domestic demand at the inflated wartime prices. Third, the price inflation in the United States during the war had not been accompanied by similar inflation in other countries. Thus, many American products were priced out of world markets. Unable to sell at home and abroad, goods piled up and productive capacity went unused. As a result, prices plummeted. The United States experienced an almost uninterrupted price deflation from 1865 to 1879. After a brief upward jaunt in the early 1880's, prices continued their downward trend until the latter 1890's.

The falling price level brought severe hardships to debtors. Farmers and others were obliged to repay debts in fixed amounts of money, which represented far more in commodities than at the time the debts were contracted. Mortgages incurred while corn was over \$2 a bushel had to be repaid with corn at 77 cents a bushel. The way to get out of these difficulties seemed to be price inflation—increase the amount of money relative to the supply of goods, thereby raising the market value of those goods. If gold were insufficient to provide a money expansion, let us have free and unlimited coinage of silver. Here lay the popular appeal of silver.

The general clamor for relief and the emphasis on silver was voiced with increasing volume in the mid-1870's when farming and other debtor interests were joined in protest by silver producers.

### **The silver miners**

Silver producers got into the fray for a special reason. Although we were still on a paper standard, silver producers could obtain relatively high prices in the market. Little silver money was in circulation. Thus it was not surprising that Congress, in

simplifying the coinage, omitted the silver dollar from the list of coins to be minted by an act passed in 1873.

Yet, scarcely three years later, the Act of 1873 was to raise the political roof. For during this period the increasing output of western silver mines and the shift of European nations from a bimetallic to a gold standard led to an ever-growing supply of silver relative to demand and consequently downward pressure on prices. When the free market price dropped, silver producers took silver to sell at the mint. To their surprise they found that the Treasury would buy only as much silver as it needed for subsidiary coins—dimes, quarters, and the like. No longer was there unlimited coinage of silver.

An enormous protest went up from the silver producers. Miners and debtor elements in the West and South, sounded the war cry for unlimited coinage of silver at the old mint ratio of 16 to 1. The act demonetizing silver became known as the "crime of '73." The debtors and silver miners dug in for a pitched battle against creditor interests of the North and East.

By 1878, the silver forces were able to push a measure through Congress (the Bland-Allison Act) which, though refusing to grant the coveted free coinage of silver, did provide for purchases of not less than \$2 million and not more than \$4 million worth of silver each month at the market price. Later, in the Sherman Silver Purchase Act of 1890, the Secretary of the Treasury was directed to purchase 4.5 million ounces of silver a month, paying with paper money called Treasury notes which were redeemable in either gold or silver at the discretion of the Secretary.

In 1893 the Sherman Act was repealed. But this did not close the matter. In the election of 1896, spurred by William Jennings Bryan's famous protest against gold, the Democratic



Party came out four-square for free silver. The platform read in part:

We declare that the Act of 1873 demonetizing silver without the knowledge or approval of the American people has resulted in the appreciation of gold and a corresponding fall in the prices of commodities produced by the people; a heavy increase in the burdens of taxation and of all debts, public and private; the enrichment of the money-lending class at home and abroad; the prostration of industry and impoverishment of the people.

We are unalterably opposed to monometallism which has locked fast the prosperity of an industrial people in the paralysis of hard times.

Though the eloquence of William Jennings Bryan echoed from the canyons of the West to the marbled halls of Wall Street, the silver Democrats were defeated by the McKinley gold standard Republicans. Four years later, in 1900, the Gold Standard Act was passed, which defined the dollar solely in terms of gold.

For over 30 years the silver issue lay relatively fallow. Then, with the coming of the Great Depression of the 1930's, the question came up once more. As part of a program to mitigate the scourge of unemployment and price deflation, Congress passed the Silver Purchase Act of 1934, wherein the Treasury was directed to buy silver until the value of the silver stock equaled one-fourth of the value of the gold stock, or until the market price of silver reached \$1.29 per fine ounce.

### **THE ROLE OF SILVER IN TODAY'S ECONOMY**

Looking back from today's vantage point, we take it as standard procedure that an increase

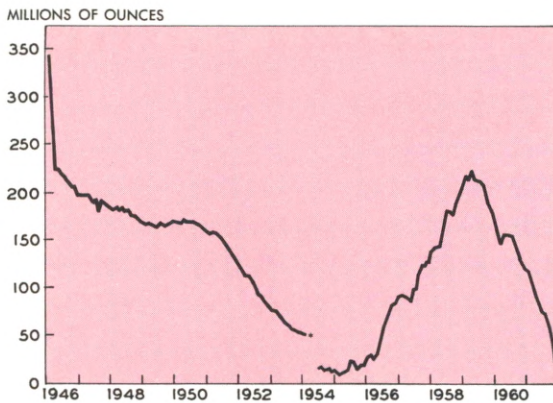
in the money supply is one measure which may provide some relief during a prolonged depression or price deflation. But the silverites of the nineteenth century blew the silver purchase plans all out of proportion to their actual efficacy in fighting the hardships of the era. To the advocates of free silver, the shining white metal became a panacea. It became an emotional call to arms, the substance of story and song, a part of American folklore. And though our ideas of the cause and cure of depression and deflation have changed greatly since the days of Bryan's fiery oratory, silver purchase legislation still remains on our statute books. We are left with the heritage of a bygone era—the deflation of the latter part of the nineteenth century and the Great Depression of the 1930's.

Yet, today we realize that the purchase of silver would be of relatively small (indeed infinitesimal) value in fighting recession. During depressions or recessions what is needed in the area of monetary policy is an over-all attack directed at ease in the total volume of money and credit—not just paper money and coin but an increase in the ability of banks to make loans that will stimulate economic activity—thus providing more jobs and more income. And even then monetary policy alone may well be insufficient.

### **THE NEW PROPOSALS**

The new Presidential directives and proposals are designed to take the "leftovers" out of our money system. Last November, President Kennedy started the ball rolling by doing two things. First, he ordered the Treasury to stop selling Government-owned silver, primarily because Treasury stocks had been seriously depleted by industrial users (as shown in the accompanying charts). Second, he ordered the Treasury to start withdrawing \$5 and \$10 silver certificates

"FREE SILVER" (THAT IN EXCESS OF AMOUNTS REQUIRED TO BACK SILVER CERTIFICATES) HAS DECLINED PRECIPITOUSLY IN RECENT YEARS IN RESPONSE TO A STRONG AND RISING INDUSTRIAL DEMAND FOR THE METAL



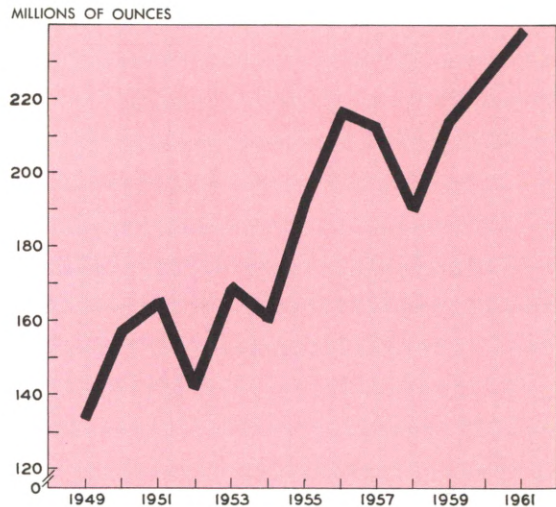
\* Not shown separately on Treasury statements.  
Source: Daily statement of the U. S. Treasury.

at once, to be replaced by Federal Reserve notes of the same denomination.

The President has asked Congress to do two other things: (1) to repeal the law that requires the Treasury to purchase silver at 90.5 cents an ounce; (2) to allow withdrawal of \$1 and \$2 silver certificates and enable the Federal Reserve to replace these with Federal Reserve notes.

In effect, the directive and Congressional proposals would get the Treasury out of the currency business. The Federal Reserve would be responsible for issuing all paper money. The Treasury would issue all coin and would buy silver needed for such coinage at the prevailing free market price and at Treasury discretion. This would help simplify a somewhat confusing monetary system in which two agencies—the Treasury and the Federal Reserve System—are jointly responsible for issuance of paper money. In addition, it would contribute toward greater economy in Government by eliminating Treasury

FREE WORLD SILVER CONSUMPTION IN ARTS AND INDUSTRIES HAS JUMPED SHARPLY SINCE 1949



Source: Handy and Harman estimates.

expenditures for the stockpiling of silver bullion and by making bullion currently held against silver certificates available for coinage.

On the other hand, repeal of silver legislation would affect the nation's "free" gold supply somewhat. Since Federal Reserve notes must be backed by a 25 per cent gold certificate reserve, any exchange of Federal Reserve notes for silver certificates would mean that more gold certificates would be required to back the existing supply of currency.

At present, the Federal Reserve has gold certificates amounting to about 35 per cent of its note and deposit liabilities, a comfortable margin over the required 25 per cent reserve. Issuance of Federal Reserve notes in exchange for all silver certificates would lower this gold reserve ratio only to about 34 per cent of note and deposit liabilities or a decline of one percentage point. In all, about \$580 million in additional gold would be needed as a currency reserve.



Whether these changes are made is, of course, up to Congress. The fact that the proposals have been received by the public with relatively little

fanfare, however, indicates that silver is no longer the emotionally charged issue it has sometimes been in the past.

## CAPITAL SPENDING—GREEN LIGHT UNDER YELLOW

Somewhere, once, we encountered a traffic signal which flipped from yellow to yellow and green,



then went to green alone. The combination of green and yellow was a small shock, because it was unexpected.

But the message got through. Green under yellow meant, "Caution time's about over; get ready to move."

Last fall, our annual survey of Philadelphia manufacturers revealed rather tentative capital spending plans. On the face of it, the situation was plain—a 10 per cent drop projected from 1961 to 1962. But experience with these surveys counsels caution in years such as 1961—years which include the beginnings of an upturn in business activity. At such times manufacturers tend toward conservatism. Before planning more liberal spending on plant and equipment, they wait for their own industries' experience to confirm the business recovery. So last fall, knowing that if recovery continued we probably had collected a set of underestimates of capital spending in 1962, we didn't say, "Down 10 per cent; that's bad." Instead, the report read, "The findings . . . reveal a prevalent caution. . . ." The

light was yellow.

Indecision is not a happy state. A curious psychologist once tried keeping rats in such a condition. He fixed it so that in order to get food or water the rats had to cross an area that was electrified most of the time. After 30 days of balancing hunger against fear of shock, the rats developed gastric ulcers!

Now, neither executives nor economists want to augment their already adequate collections of ulcers. Suspecting that executives would take action, we did the same. We asked 45 large firms from the important industries in the Philadelphia Metropolitan Area about changes in capital spending plans. The majority had revised capital spending estimates since September, 1961. About three-quarters of the revisions were increases. Although the yellow light still shines, there is a glint of green as well.

### CHANGE IN 1962 CAPITAL EXPENDITURES ESTIMATE, SEPTEMBER, 1961—JANUARY, 1962

| CHANGE IN ESTIMATE | NUMBER OF FIRMS |
|--------------------|-----------------|
| Increases          |                 |
| Under 10%          | 2               |
| 10% or over        | 17              |
| Total              | 19              |
| Decreases          |                 |
| Under 10%          | 2               |
| 10% or over        | 6               |
| Total              | 8               |
| No revision        | 18              |



Regardless of direction, the revisions were well diffused among industries. The only concentration discernible was a tendency for upward revisions to occur among firms which in September had planned to decrease capital spending, rather than among those that originally planned increases.

National surveys indicate moderate advances

in capital spending in 1962. In manufacturing industries, the estimates total about 6 to 7 per cent above 1961.\* We have taken a quick snapshot of the decision-making now going on in the Philadelphia area. It indicates that last September's projected 10 per cent decline will be reduced, and may even turn into a rise.

\* The latest estimate of U. S. capital expenditures dates from November, 1961.

## THE NEW FOUR PERCENTERS

### Results of a Survey of Bankers' Actions in Response to the New Ceilings on Savings and Time Deposits.

The news broke on December 1, 1961. It had considerable significance for both banks and savers.

On that date, the Federal Reserve and the Federal Deposit Insurance Corporation announced new upper limits for interest rates on savings and time deposits. Beginning January 1, 1962, commercial banks, in the absence of state laws to the contrary, would be permitted to pay up to 4 per cent on savings and time deposits left with them a year or more. The limit on other savings and certain time deposits would be 3½ per cent. The previous maximum was 3 per cent.

The move had two principal purposes: first, to enable banks to compete more effectively for foreign deposits and, second, to aid banks in their

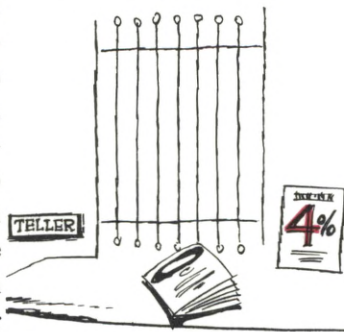
competition with other savings institutions.

Delaware and New Jersey have no state laws limiting payment of interest on time and savings deposits of commercial banks, but Pennsylvania does. On December 22, 1961, the Pennsylvania Banking Department authorized, effective January 1, 1962, an increase in rates up to 4 per cent. The Department added certain stipulations, not found in Federal Reserve regulations, as to the conditions under which the upper rate of 4 per cent could be paid.

The new regulations, however, merely staked out upper limits. No bank was compelled to change its rates. In every case, the decision was up to the individual banks.

How many decided to raise their rates? Were the new limits widely embraced or virtually ignored?

We called a random sample on the phone. About 200 calls and several cauliflower ears later, we had our results—results which should be a statistically accurate picture of all 3-C members.



The calls were made during the last week in January and we found there had been a considerable number of rate boosts.

Some banks went right to the top. One-tenth of all banks in the survey were offering the new 3½ per cent limit on savings accounts held less than a year. On savings accounts aged a year or more, only one per cent of the banks had gone to the 4 per cent ceiling.

In the time deposit category, 11 per cent of the banks were paying 3½ per cent as a maxi-

mum. More than one-fifth of the banks now offered the 4 per cent top on time deposits of a year-or-more vintage.

In addition to these top-of-the-line increases, there was considerable moving up throughout the rate structure. Banks that used to pay 2 per cent went to 2½ and so on.

All told, 23 per cent of the banks in the survey had increased their rates on savings deposits and 38 per cent increased rates on time deposits.

There doesn't seem to be much relationship between rate increases and bank size. You can't say it was principally large or principally small banks—there were plenty of increases in all categories.

For example, 36 per cent of the sample banks with deposits of \$10 million to \$20 million increased their rates on savings deposits. This was the highest percentage for any size group. The lowest was the over \$100 million category where 13 per cent of the banks increased.

For time deposits, increases were most prevalent in the \$20 million to \$100 million category and least prevalent in the \$5 million to \$10 million class.

Did the relative importance of savings and time deposits to a bank have anything to do with its decision to raise rates? Our analysis indicated that banks with a high proportion of interest-bearing deposits to total deposits were somewhat less likely to have increased their rates on time deposits.

When the survey was made, many bankers were still considering whether to raise rates or not. Some said they would make up their minds at the next interest-payment date.

**THE RATE STRUCTURE—BEFORE AND AFTER\***

*(Percentage Sample of Banks Paying Specified Rates)*

| INTEREST RATE (%) | SAVINGS DEPOSITS  |                     |                   |
|-------------------|-------------------|---------------------|-------------------|
|                   | DECEMBER 31, 1961 | JANUARY, 1962       |                   |
|                   |                   | DEPOSITS HELD—      |                   |
|                   |                   | LESS THAN 12 MONTHS | 12 MONTHS OR MORE |
| 1                 | 1                 | 1                   | 1                 |
| 2                 | 13                | 7                   | 7                 |
| 2½                | 12                | 7                   | 7                 |
| 3                 | 74                | 76                  | 76                |
| 3½                |                   | 9                   | 8                 |
| 4                 |                   |                     | 1                 |
| Total             | 100%              | 100%                | 100%              |

| TIME DEPOSITS |      |      |      |
|---------------|------|------|------|
| 1             |      | 2    |      |
| 2             | 3    | 5    |      |
| 2¼            |      | 10   |      |
| 2½            | 10   | 15   | 3    |
| 3             | 87   | 64   | 62   |
| 3¾            |      | 2    |      |
| 3½            |      | 11   | 13   |
| 4             |      |      | 22   |
| Total         | 100% | 100% | 100% |

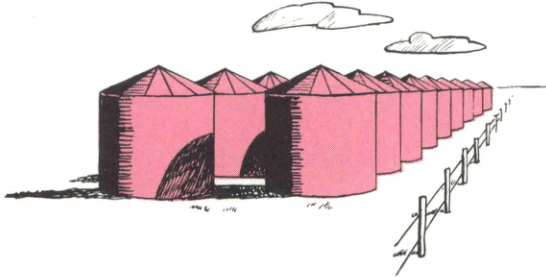
\* Based on a sample of 197 member banks.



# ROUNDING THE HORN OF PLENTY

Out where the Middle West begins, a feature of the countryside is an occasional covey of a dozen or more containers—low, round, shiny metal containers holding in storage the overflow grain of former harvests.

Deeper in the middle of the Middle West where the landscape is all wheat, the fenced-off stands of storage tanks, resembling sunken silos sometimes number up to several hundred to a corral. “Property of the Commodity Credit



Corporation,” read the signs on the fences, with a warning that the property is not to be tampered with.

The multitudes of Commodity Credit containers in the corn and wheat belts are monuments to the price-propping program designed to bolster farm income by diverting production from the market to the Government by loan or purchase program. In effect, the Government through the CCC takes over whatever the market will not absorb at the support price.

The Government program has applied not only to grain but also to cotton, grain sorghums, dairy products, potatoes, wool, peanuts, eggs, rice, barley, flaxseed and linseed oil, cottonseed, oats, beans, seeds, soybeans, rye, hemp and hemp fiber, sugar beets, dried fruits, and other products.

The CCC now holds huge supplies of com-

modities. Surpluses always tend to build up faster than they can be worked off. Acreage restrictions have failed to curtail production because artificial price support stimulates more intensive cultivation of acreage planted, and about all the CCC can do with its mountains of assorted surpluses is to give the stuff away, barter it away, or get rid of it through export subsidy, and take the losses.

Heavy harvests spell heavy losses. Since 1933, when the CCC was created, it has absorbed net operating losses of about \$13 billion. More of the same seems inevitable, in the absence of war, severe drought, or change in public policy. If we can't get around the horn of plenty by way of limiting supply, how about the alternate route of enlarging demand?

## New uses for farm products

On Mermaid Lane, just beyond the boundary of Philadelphia, on a 31-acre plot formerly part of the Stotesbury estate, stands a modern three-story, U-shaped building that might easily be mistaken for another Philadelphia office that escaped to the suburbs. Unlike most office buildings, however, this one houses a lot of people with degrees, scientific apparatus, a technical library, esoteric machinery, and strange odors in spots. It is a laboratory—a division of the United States Department of Agriculture.

Its lengthy name—Eastern Utilization Research and Development Division—conceals almost as much as it reveals about its purpose and function. Its purpose is to find new markets for agricultural products, particularly those in surplus—and that's quite a crowd.

The laboratory is really a series of intercon-

nected laboratory rooms with adjoining offices for study and writing, a basement-to-roof pilot plant that occupies nearly one full wing of the building, conference rooms, shops, cafeteria, administrative offices, and also a food preparation and evaluation laboratory where consumer panels test new food preparation and give them gustatory grades. This is the end of the research and development production line for foods. From it have emerged, for example, full-flavor fruit juice concentrates and powders (apple, grape, cherry strawberry, and blueberry) which when mixed with water become delicious beverages closely approaching fresh juices in color, flavor, and aroma.

A lowly vegetable is the potato, but oh, so versatile! It can be baked, boiled, broiled, home fried, French fried, creamed, diced, riced, mashed, scalloped, chipped, souped, lyonnaised, julienned, and au gratiné—yet the potato has lost prestige. To help regain popularity, the Eastern Laboratory developed potato flakes—a new kind of dehydrated mashed potatoes. Flaked potatoes retain vitamins better than fresh potatoes, are easily stored in the pantry, and eliminate last-minute mashing by the harried housewife. Flaked potatoes, introduced four years ago, are now made by a dozen companies with a combined annual capacity of 65 million pounds.

Most of the by-product fat of animals slaughtered for meat used to be cooked into soap. With the switch from soap to synthetic detergents that began about the time of World War II, one of the principal domestic markets for animal fats all but melted away. Fortunately, good foreign markets continued to take large amounts of our animal fats, but in anticipation of foreign markets ultimately shifting to synthetic detergents also, the Eastern Laboratory sought to find other uses. Obviously they succeeded or else we wouldn't

have brought up the subject. By some molecule magic the chemists persuaded the animal fats to become plastics and plasticizers. Now you don't know whether your automobile seat covers, galoshes, raincoats, and garden hose came out of a petroleum still or a barnyard. Incidentally, largely as a result of this research, animals themselves have become big consumers of animal fats—that is, of those which preceded them to the abattoir. Over a half-billion pounds of animal fats are used each year in the form of fat-fortified feeds for poultry and livestock.

Leather, another by-product of the meatpacking industry, encountered a double dose of adversity. Demand for prime ribs of beef grew faster than the demand for shoes and luggage, and synthetic leather stole a big slice of the market for natural leather.

Longer-lasting and more comfortable shoes may result from the research in leather at the Eastern Laboratory. Leather is generally used for insoles because its fibrous and porous nature allows the passage of air and moisture necessary for foot comfort. Quality of vegetable-tanned leather is improved when re-tanned with chrome salts; and Eastern's chemists have found ways to obtain the same improvement by using the cheaper and non-critical alum as a substitute for chrome. They also developed a tannage that is resistant to washing and may eventually lead to production of a washable leather for use in the garment trades.

Among other products and processes included in Eastern's research program are: dried honey, dried whole milk, dried soup mixes, high-flavor maple syrup, and tobacco products.

Cruising through the laboratory, we were mystified by much of the equipment; but one piece of machinery we had no difficulty comprehending was a cigar-smoking machine. Utterly devoid of brand preference, it smokes two cigars



simultaneously for the sole purpose of producing smoke for chemical analysis. Years ago, research on tobacco at this laboratory discovered rutin, a useful drug for treating blood vessels that need doctoring.

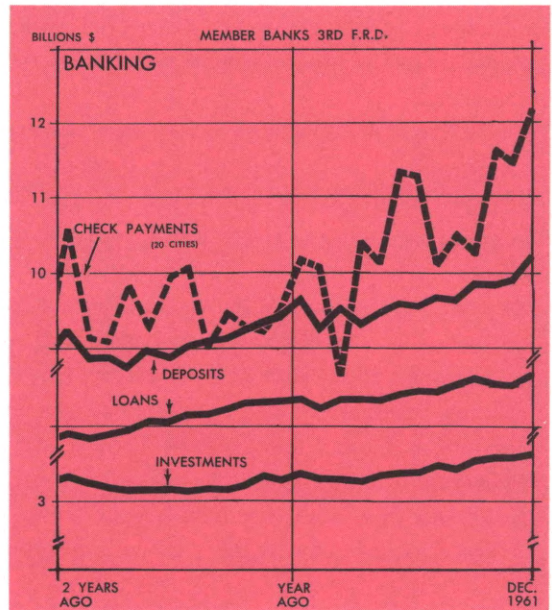
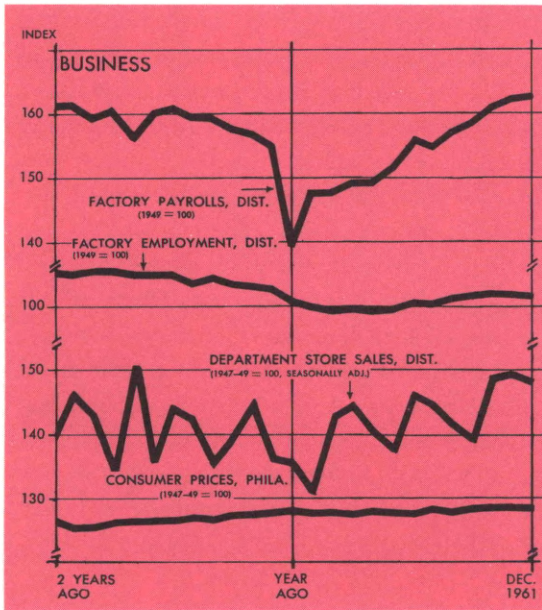
The Eastern Laboratory serves agriculture in the Northeast, embracing the New England and Middle Atlantic states, Kentucky, and the Virginias. Three other laboratories of similar nature operate in other regions. The Northern Laboratory in Peoria does research to increase the utilization of cereal grains, soybeans, and oil-seed crops. The Southern Laboratory in New Orleans specializes largely in cotton, peanuts, and citrus fruits; the Western Laboratory in California directs much of its efforts on Western fruits and vegetables, wool, and sugar beets.

The regional research laboratories were estab-

lished about two decades ago and have achieved remarkable results in expanding utilization of farm products. They have developed over a hundred processes which are now in commercial use. Patents covering developments are assigned to the Secretary of Agriculture, from whom any individual or organization in the United States may obtain cost-free licenses for commercial exploitation. In our local supermarket, we observed five different brands of potato flakes.

The laboratories are well worth their salt. It is estimated that their output in tangible results represents a twelvefold yield over their keep. Imagine the amount of utilization research that could have been done with even a very small fraction of the \$13 billion which has already gone into price-supporting operations since the founding of the Commodity Credit Corporation!

# FOR THE RECORD...



## SUMMARY

|                              | Third Federal Reserve District |          |                            | United States   |          |                            |
|------------------------------|--------------------------------|----------|----------------------------|-----------------|----------|----------------------------|
|                              | Per cent change                |          |                            | Per cent change |          |                            |
|                              | Dec. 1961 from                 |          | 12 mos. 1961 from year ago | Dec. 1961 from  |          | 12 mos. 1961 from year ago |
|                              | mo. ago                        | year ago |                            | mo. ago         | year ago |                            |
| <b>MANUFACTURING</b>         |                                |          |                            |                 |          |                            |
| Production.....              | ....                           | ....     | ....                       | - 3             | +12      | + 1                        |
| Electric power consumed..... | - 1                            | +15      | + 3                        | ....            | ....     | ....                       |
| Man-hours, total*.....       | - 1                            | +14      | - 4                        | ....            | ....     | ....                       |
| Employment, total.....       | 0                              | + 1      | - 3                        | - 1             | + 2      | - 3                        |
| Wage income*.....            | 0                              | +17      | - 2                        | ....            | ....     | ....                       |
| <b>CONSTRUCTION**</b>        | -20                            | +21      | +16                        | -10             | 0        | + 2                        |
| <b>COAL PRODUCTION</b>       | - 7                            | + 9      | - 5                        | - 5             | + 6      | - 3                        |
| <b>TRADE***</b>              |                                |          |                            |                 |          |                            |
| Department store sales.....  | - 1                            | + 9      | + 2                        | + 2             | + 7      | + 2                        |
| Department store stocks..... | + 2                            | + 7      | ....                       | 0               | + 4      | ....                       |
| <b>BANKING</b>               |                                |          |                            |                 |          |                            |
| (All member banks)           |                                |          |                            |                 |          |                            |
| Deposits.....                | + 3                            | + 6      | + 6                        | + 5             | + 9      | + 7                        |
| Loans.....                   | + 3                            | + 6      | + 6                        | + 3             | + 6      | + 4                        |
| Investments.....             | + 1                            | + 7      | + 7                        | + 1             | +12      | +13                        |
| U.S. Govt. securities.....   | + 1                            | + 8      | + 8                        | + 1             | +10      | +13                        |
| Other.....                   | + 1                            | + 3      | + 2                        | + 3             | +17      | +12                        |
| Check payments.....          | + 6†                           | +20†     | +12†                       | + 5             | +11      | +10                        |
| <b>PRICES</b>                |                                |          |                            |                 |          |                            |
| Wholesale.....               | ....                           | + 1      | + 1                        | 0               | 0        | 0                          |
| Consumer.....                | 0‡                             | + 1      | + 1                        | 0               | + 1      | + 1                        |

\*Production workers only.  
 \*\*Value of contracts.  
 \*\*\*Adjusted for seasonal variation.

†20 Cities  
 ‡Philadelphia

## LOCAL CHANGES

|                  | Factory*                       |          |                                |          | Department Store†              |          |                                |          | Check Payments                 |          |
|------------------|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|--------------------------------|----------|
|                  | Employment                     |          | Payrolls                       |          | Sales                          |          | Stocks                         |          | Check Payments                 |          |
|                  | Per cent change Oct. 1961 from |          | Per cent change Oct. 1961 from |          | Per cent change Oct. 1961 from |          | Per cent change Oct. 1961 from |          | Per cent change Oct. 1961 from |          |
|                  | mo. ago                        | year ago | mo. ago                        | year ago | mo. ago                        | year ago | mo. ago                        | year ago | mo. ago                        | year ago |
| Lehigh Valley... | + 1                            | + 3      | + 3                            | +16      | ....                           | ....     | ....                           | ....     | - 5                            | +13      |
| Harrisburg.....  | 0                              | - 1      | - 1                            | +10      | ....                           | ....     | ....                           | ....     | - 7                            | - 2      |
| Lancaster.....   | - 1                            | + 2      | 0                              | +18      | + 3                            | + 9      | + 7                            | + 4      | 0                              | + 9      |
| Philadelphia.... | 0                              | 0        | 0                              | +16      | 0                              | +11      | + 2                            | +10      | + 5                            | +19      |
| Reading.....     | 0                              | + 1      | - 1                            | +12      | + 4                            | + 5      | - 6                            | - 1      | - 8                            | +21      |
| Scranton.....    | - 1                            | + 2      | - 2                            | + 8      | 0                              | + 2      | + 3                            | - 4      | - 4                            | - 5      |
| Trenton.....     | 0                              | + 6      | + 5                            | +30      | - 4                            | + 3      | - 3                            | + 7      | + 5                            | +13      |
| Wilkes-Barre...  | + 1                            | - 1      | + 2                            | +10      | + 3                            | + 8      | - 1                            | 0        | - 1                            | 0        |
| Wilmington....   | 0                              | + 1      | 0                              | + 5      | - 1                            | +13      | + 2                            | +11      | +28                            | +55      |
| York.....        | 0                              | - 1      | - 1                            | +14      | - 2                            | +10      | + 8                            | + 6      | - 5                            | +13      |

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