

# BUSINESS REVIEW

FEDERAL RESERVE BANK OF PHILADELPHIA

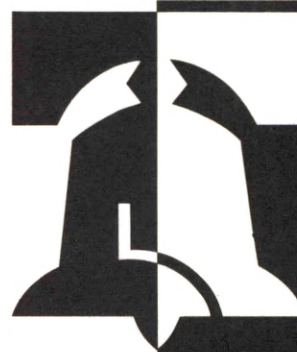
1963: The Year the Torch Was Passed

Statement of Karl R. Bopp Before  
Congressional Committee

How Does Our Region Grow?

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# 1963: THE YEAR THE TORCH WAS PASSED\*

The year 1963 was one of progress, problems, and crisis. The progress came as the nation moved ahead to produce goods and services in record volume. Real gross national product, for example, increased by almost 4 per cent and the industrial production index rose 7 per cent. As a result, per capita personal income climbed to about \$2,500 and corporate profits before taxes rose to a record level of over \$50 billion.

Despite this progress, many problems remained. Unemployment clung stubbornly above 5½ per cent of the labor force. Our balance of payments again showed a deficit.

But 1963 will not be remembered primarily for statistics nor even for our continuing and difficult problems. More likely, we shall remember it for tragedy and for the panic this tragedy could have carried in its wake. The year 1963 ended with the assassination of the President, and this tragic event had the potential to set off an international money panic of major proportions.

Yet it did not. Today I want to discuss the question of why it did not. The story is little known but of great importance, for it depicts the resources and techniques developed through the years both to deal with crisis and to aid in solving basic balance-of-payments problems. The story of crisis begins on the fateful day of November 22.

Shortly after 1:30 p.m., Eastern Standard

\* An address by Karl R. Bopp, President of the Federal Reserve Bank of Philadelphia, before the Monday Afternoon Session, January 27, 1964, of the American Bankers Association National Credit Conference held at the Bellevue-Stratford Hotel, Philadelphia, Pennsylvania.

Time, the world knew the President had been shot. At 2:36 p.m. Assistant White House Press Secretary Malcolm Kilduff announced that the President was dead.

How would the world react? One of the first indicators was the stock market. The news hit the floor of the New York Stock Exchange about 1:40. There were rumors too that the Vice President had been shot. What happened then has become history. The market plummeted. To quote the New York Herald Tribune:<sup>1</sup>

*The only rationalization the brokers could find for the fantastic declines in some stocks was the fact that some panic sellers couldn't see what prices they were getting for their stocks in their desire to unload 'at the market.' Stop-loss orders obviously were triggered in machine-gun fashion and the situation seemed to be getting almost out of control when the Exchange decided to stop trading altogether Friday at 2:09 p.m.*

*'I sat in the board room Friday,' said one large investor, 'and I was appalled at what I saw. I heard one individual tell his man, "Sell me out at any price" and I winced. What happens to people?'*

In about 29 minutes, 2.2 million shares were traded, more than in many entire days in recent years. The Dow-Jones industrial average plunged about 24 points. High Voltage Engineering fell from a high of 41½ to 28¼. Delta Airlines declined from an opening of 62 to 52.

Would the panic spread? What would officials

<sup>1</sup> David Deich, "After a Panic—a Rebound," *New York Herald Tribune*, November 24, 1963, Section 3, p. 2.

do who were responsible for orderly world financial and economic conditions? What must be going on in *their* minds?

Officials in the Fed, the Treasury, and other agencies reflected the universal and immediate emotion of shock, incredulity, disbelief. But a job was there and it had to be done. Action must replace shock. The possible sources of international panic must be sorted out and the many methods and resources available to counter that panic must be considered.

What, then, might precipitate an international money panic?

You, as bankers, are already familiar with the inner workings of panic. Bank runs are classical examples. As you know, runs have occurred when depositors fear that banks might not be able to pay off depositors in full.

The United States acts as a sort of international banker. Other nations hold dollars for many of the same reasons a family or business firm holds deposits—as working balances to finance trade, to earn income, or as an emergency reserve against contingencies such as a crop failure. One of the reasons countries prefer to hold dollars as working balances and reserves is that the United States Treasury stands ready to redeem these dollars in gold for friendly foreign governments and central banks. Dollars are “as good as gold.”

Yet once the fear spreads that the United States may not be able to redeem dollars in gold or in foreign currencies, or once foreigners fear that they may be able to redeem dollars in lesser and lesser amounts of their own currencies—they may demand payment for their dollars just as your depositors demand currency for their deposits. Thus, it is possible to have a run on a currency just as it is possible to have a run on a bank. But what forces propel the pyramiding

of fear and speculation that culminate in international panic?

The bedrock of such unreasoning fear is shock and uncertainty. Questions pile upon questions. The President is killed? The Vice President also may have been shot? Who will take command? What will be the policies of those who take command? Will the Soviet Union take some step during the emergency which might endanger world security? And a most important question, what if foreigners who own literally billions of U. S. dollars rush to convert these dollars into their own currencies and into gold; rush to do so because they fear this very rush, fear they must be first in line in order to get their funds out of a country that may not be able to maintain the value of its currency? To further propel the rush, will currency speculators add to the cascading stream of dollars descending upon world currency markets? And what if Americans themselves should join in the rush to get out of an asset which may decline precipitously in value, to get out of dollars and into foreign currencies?

These are the types of uncertainties which precede panic and the types of forces which propel it. As in most cases where supply exceeds demand at prevailing prices, the rush to unload dollars on world currency markets tends to drive the price of dollars down. If dollar exchange rates *do* begin to fall, then the panic may reach a second dimension. Dollar holders who at first stood steadfast may falter and add to the supply of dollars. Finally, if it seems that the United States and cooperating foreign nations and world organizations will be unable to hold out against the run, there is the chance that some foreign central bank which previously had been absorbing dollars might crack and demand gold for dollar holdings. There is the chance that other

central banks might follow.

With panic and uncertainty in the air, world finance and world trade tend to grind toward a halt. Who wants to lend money to finance exports in such an atmosphere? Who wants to export for promises of future payment? As exports fall, jobs in export industries are lost and incomes decline. As jobs are lost and incomes fall, the world may plunge into the rancorous depths of depression.

Although central bankers must sort out in their minds the possible *sources* of panic, they must be quick to consider the methods and resources available to counter them—methods and resources which have been worked out in the most minute detail over the years by governments and central banks. The basic question is this: how can we best absorb the avalanche of dollars which could conceivably descend upon the market?

The first and most obvious resource is the huge United States gold supply. Though we have lost gold in recent years, we still have around fifteen-and-a-half billion dollars worth of the yellow metal and even during a panic (perhaps I should say especially during a panic) people and governments will accept gold. Thus we can sell gold to absorb dollars coming into the market. And the world may rest assured that we stand ready to sell gold—down to the last bar if necessary—to meet our international obligations. The Federal Reserve has ample power under the Federal Reserve Act to suspend statutory gold requirements against Federal Reserve notes and liabilities and thus to make any part or all of our gold holdings available to sell to foreign monetary authorities and international institutions.

But what other methods and resources are available to the United States to absorb dollars

in time of crisis—methods and resources which could supplement the sale of gold?

The United States may obtain foreign currencies from the International Monetary Fund. These may be used both to absorb dollars coming into foreign exchange markets and to buy those held by central banks and others in excess of what they wish to hold. In recent years, countries have obtained both gold tranche credits and additional funds in amounts up to 200 per cent of their quota. A theoretical drawing of this nature and magnitude by the United States would total a little over \$5 billion.

Then there are the so-called “General Agreements to Borrow” concluded in Paris in 1961 by 10 member countries (including the United States). Under this agreement, the IMF may obtain the equivalent of \$6 billion of group currencies and use this to extend additional credit to IMF members.

The network of credit facilities available to defend the dollar is further augmented by the so-called “swaps” arrangements. Under these arrangements, the Federal Reserve and 11 foreign central banks (plus the Bank for International Settlements) have set up reciprocal “lines of credit.” For example, the Bank of France will allow the Fed to draw up to 500 million francs, and the Fed in turn will let the Bank of France draw 100 million dollars. The Fed can use these funds to absorb dollars offered on the foreign exchange markets or to purchase dollars owned by foreign central banks. Swap agreements have added more than \$2 billion to the funds available for defense of the dollar.

Another technique for absorbing dollars (though generally thought of as a form of medium-term credit), could be used for short-term accommodation in case of need. This technique is the issuance of the special securities

popularly called "Roosa bonds" after the distinguished Under Secretary of the Treasury. Such bonds may be issued by the U. S. Treasury to foreign governments and central banks for payment in dollars. Such a sale of bonds for dollars would, of course, effectively remove dollars from foreign hands. At present, there are a little over \$850 million of Roosa bonds outstanding.

Rounding out the international network of cooperative arrangements which could be called upon to absorb dollars in time of crisis are the *ad hoc* type of agreements which have been worked out to aid central banks in time of special need. A good example is the so-called "Basle credits" of more than \$900 million extended by European central banks to the Bank of England during the 1961 sterling crisis. Such spontaneous agreements reflect the cooperative attitude and understanding concern of the world central banking community for those of their number caught in special situations of stress.

Yet on the afternoon of November 22 there was even more to consider.

The United States economy is essentially viable and strong. The ability to produce and the demand for the fruits of production are the real strength of any economy. As long as we can produce efficiently in a world which has an effective demand for that production, there will be a basic demand for the dollar. This is not to say that we do not have problems—among the most important, the persistently high rate of unemployment and the continuing balance-of-payments deficit. Yet essentially the economies of this nation and of the free world remain strong.

This basic strength, plus the network of defensive arrangements, and the cooperative attitude of the world's central bankers and governments—these were the bulwark for the defense

of the dollar, the bulwark which one considers at a time such as November 22, 1963.

But there was still another asset, one which—though intangible—may have been in retrospect as valuable in defending the dollar as any yet mentioned. That asset was a sudden intensification in awareness of the human condition, of the fragile nature of human life, the temporality of human existence—the condition that binds us all together as human beings.

Perhaps it was the disproportion of the act of assassination that brought about this intensification of feeling—that a man with a \$12 gun could kill the President of the United States, could kill the head of a state whose immense power and resources place it supreme among nations.

Yet whatever the reason, the feeling existed, and it was buttressed by the cooperative network of dollar defenses. With this bulwark, the reaction of European central bankers contacted by the Fed on the evening of November 22 was this: "Tell us what we can do." Indeed, the Bank of Canada acted to support the dollar without even *waiting* to be asked.

The type of environment in which the Fed operated on that November day is perhaps best illustrated by quoting the words of Charles A. Coombs, special manager for foreign operations of the Federal Open Market Committee. As reported in a recent article in the *American Banker*, Mr. Coombs has this to say:<sup>2</sup>

*I was having lunch in the dining room when there was a phone call. Someone told me the President has been shot. I jumped up and went over to talk with Al Hayes. . . .*

*Then I rushed off to the trading room on the seventh floor. By that time the news was on the ticker and there seemed to be some suggestion*

<sup>2</sup> James R. Hambleton, "Dollar's Defense—Study in Cooperation," *American Banker*, pp. 1-2.

that something had happened to Vice President Johnson.

*I thought that something had to be done immediately to prevent any 'bubbling up' in the foreign exchange market of the kind of panicky selling we were seeing in the stock market.*

*So I put in a big block of one currency and said to sell at the prevailing rate. Then, I threw in two more blocks. This all happened, oh say, within a minute of my seeing the news on the ticker. . . .*

*Almost simultaneously, I realized the Bank of Canada was in there supporting the dollar—without our having asked for help. . . .*

*. . . Right away I was on the phone to Switzerland—it was night there, of course, and I got Ikle at home. . . . We all have each other's home phone numbers. . . . We agreed to offer whatever Swiss francs were called for to keep the dollar firm.*

*Then I called the Bank of England and three or four more banks, alerting them, again reaching everyone at home. The reaction was the same everywhere: 'Tell us what we can do.'*

The net result of the cooperative action: there was hardly a bump or ripple in the foreign exchange market. Quoting Mr. Coombs again, "It was the easiest (crisis) of all to handle."

I would like to take the next few moments to illustrate how the defensive measures just described are of great assistance in dealing with our basic balance-of-payments deficit. The defensive measures are not, of course, a *solution* to our balance-of-payments problem. They provide us rather with an important *assist* in the effort to solve our payments problem. The nature of that assist can be summarized in a single word: time.

We need time because the world in which we live and the payments difficulties we are ex-

periencing are not of the classical mold. Traditionally, a payments deficit was associated with domestic overexpansion. A country which paid out to foreigners more than it received was assumed to be doing so because it was buying too large a volume of goods abroad on net balance and too many securities. It bought too large a volume of goods, the reasoning went, because domestic industry was producing at capacity and hence could not provide sufficient goods to meet demands. This tended to drive up wages and prices and thus to encourage imports of lower-priced foreign goods and discourage high-priced domestic exports. The result: a net outflow of funds on trade account.

A second source of imbalance in the classical model was a net outflow of funds to purchase foreign securities. The reason why such an outflow occurred, the reasoning went, was that interest rates abroad were higher than those at home.

The way to right such a deficit seemed simple enough—if prices were too high and interest rates too low, then take action to lower prices and raise interest rates. The policy measure which could accomplish the task: tight money.

The central bank simply made less money and credit available. With less money and credit pursuing a limited amount of goods, domestic prices would tend to fall. With less money to borrow, interest rates would tend to rise. Both trade and capital accounts would improve and balance-of-payments equilibrium would be restored.

This was the classical remedy. Tight money could be applied rapidly; it would help both the trade and capital accounts; it was consistent with both internal and external difficulties.

Yet our *present* deficit is not of this classical nature. We are not producing at capacity and forcing wages and prices up. Indeed, at the same

time our international payments are in deficit, we have substantial *unemployment*; we are producing and consuming at *less* than our capacity. Moreover, much of the capital leaving the country is not induced by interest rate differentials. Hence a resort to the classical procedure of tight money, though the measure can be implemented quickly and efficiently, would be injurious domestically and of dubious utility on the international front.

But if we are not to use the classical measures, what avenues are open to an attack on the balance-of-payments problem?

To make a long story short, the measures must be consistent with our particular type of payments difficulties. Today we have a net export surplus and thus a net inflow of funds from abroad on trade accounts. But this is not enough to cover the outflow of funds for the network of military installations and attendant personnel abroad, and for other Government payments plus the flow of private investments to foreign nations.

In short, the balance-of-payments problem today is not solely economic. In large measure it is the economic reflection of a socio-political problem. Such problems take time to solve. The cold war did not start nor will it end in a day. Thus the same defensive network which has served us so well in time of crisis—from the

Cuban missile threat to the assassination—this network also helps us absorb dollars in the longer-run transition to balance-of-payments equilibrium.

Again let me emphasize the fact that we have not solved our payments problems. Indeed, there is much left to be done. Our network of defensive measures simply gives us time to diagnose our payments ills and apply the right medicine.

In closing, let me say that the year just ended was a trying one, a year of national grief, national introspection, and national trial. Yet our democratic institutions have so far measured up to this trial.

In his inaugural address—that cold, windy day in January over three years ago—President Kennedy said this, and I quote:

*Let the word go forth from this time and place, to friend and foe alike, that the torch has been passed to a new generation of Americans—born in this century, tempered by war, disciplined by a hard and bitter peace, proud of our ancient heritage. . . . Let every nation know . . . that we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure the survival and the success of liberty.*

In the year 1963, the torch was passed again.



**Statement of  
KARL R. BOPP  
PRESIDENT, FEDERAL RESERVE BANK OF PHILADELPHIA  
before the  
SUBCOMMITTEE ON DOMESTIC FINANCE  
of the  
COMMITTEE ON BANKING AND CURRENCY  
HOUSE OF REPRESENTATIVES**

Thursday, January 30, 1964

Mr. Chairman and Members of the Committee:

My name is Karl R. Bopp. I have been a member of the staff of the Federal Reserve Bank of Philadelphia since September 1941 and President since March 1, 1958. Before I came to the Bank I was on the faculty of the University of Missouri. It is a privilege to appear before you to testify on several of the bills that are before you relating to the Federal Reserve System. My introductory statement is brief. Although there might be some advantage to the Committee to hear the full statement before you raise questions, please do not hesitate to interrupt me at any point if you prefer to do so.

**H.R. 9631:**

I begin with H.R. 9631, "A bill to increase to twelve the number of members of the Federal Reserve Board, and for other purposes."

*Section 1* would reorganize the Federal Reserve Board by increasing its size, reducing the term and tenure of its appointed members, and changing its structure and composition.

With respect to *size*, the bill would increase the membership from seven to twelve, including the Secretary of the Treasury as Chairman. It

seems to me that a board consisting of eleven members who devote their entire time to the business of the Board would be unwieldy. Chairmen of the Board of Governors who have expressed their view on the matter of size have favored a reduction rather than an enlargement from the present number. Certainly membership on the Board would be less attractive as one of eleven or twelve than as one of seven or five.

As to *term* and *tenure*, the bill would reduce the term from fourteen years to four and would make tenure of appointive members subject to removal by the President. An appointive member would be ineligible for reappointment for four years. Since the *maximum* term is four years, average tenure would be shorter and turnover would necessarily be rapid; there could be little continuity except that provided by the staff. An individual without independent wealth and income would be forced to give thought to his next position almost from the time he began to learn about the responsibilities of membership; and his next position would necessarily become a matter of increasing concern as the end of his term approached, since even top performance would not qualify him for another term.

The bill would change the *structure* and *composition* of the Board. It would make the Secretary of the Treasury Chairman. This would place on the Secretary a new responsibility that is inconsistent with an existing responsibility. As Secretary, he is the largest borrower in the world by a wide margin. As borrower he appropriately desires the lowest borrowing cost possible. As Chairman of the new Board, he would head the agency with the largest single portfolio of government securities, an agency whose primary concern is to promote credit conditions appropriate to the entire economy, including but not limited to the Government. The sad experience of many countries, including our own, with putting these conflicting responsibilities in the hands of a single individual leads me to conclude that it should not be done.

An additional difficulty would be occasioned by having the Secretary serve as Chairman of the Board. He would rarely find time actually to attend meetings. This, at any rate, was the experience before 1936 and I would anticipate no change. Unfortunately, this is a function that should not be delegated.

The bill would provide also for a Vice Chairman, designated by the President from among the appointive members, who would be the active executive officer of the Board. It is probably desirable to have a chief executive officer but the brevity of the maximum term would militate against efficiency and continuity of operations.

In describing the qualifications of appointive members, the bill requires fair representation of certain specified interests and of geographic divisions. I would prefer the law to specify that every member be qualified and selected to represent the public interest and that residential qualifications be eliminated.

*Section 2* would create a Federal Advisory

Committee to replace the present Federal Advisory Council. The proposed Committee would be so large that its deliberations would likely be too time consuming to hold able members or its results would likely be perfunctory.

*Section 3* would transfer the powers, duties, and functions of the Federal Open Market Committee to the new Board. To abolish the Federal Open Market Committee would change the basic character of the System. It would eliminate the most important opportunity for public service and hence seriously reduce the attractiveness of the presidencies of the Federal Reserve Banks, with resulting deterioration in the quality of the managements and of the services performed by those banks. I continue to agree with the view expressed by the Patman Subcommittee in 1952 that "the present arrangement serves a useful purpose and (that there is) . . . no reason to disturb it."

*Section 4* would direct the Comptroller General to make an annual financial and management audit of the Board, the Reserve Banks and their Branches. Chairman Martin has described present auditing procedures which, by deliberate design, are independent of operating management. President Bryan submitted a statement to the Patman Subcommittee in 1952 which demonstrates that this change would not produce the desired results. It would reduce the authority of the directors, who are a driving force to increase efficiency. It would divert the attention of management from continuous and occasionally bold new efforts aimed at promoting efficiency to the negative approach of concentrating on avoiding risks.

#### **H.R. 9685:**

This bill would subject the Board and the Reserve Banks to appropriations by the Congress.

The supplementary statement by President Bryan, to which I have already referred, demonstrates that this change would not achieve either better monetary policy or greater operational efficiency.

The Congress could expose the country to the hazard of seriously interrupting our payments mechanism by subjecting the Reserve System to Congressional appropriations. An efficient system of payments: collection of checks, provision of currency and coin, is indispensable to sustained economic growth. Interruption in the smooth flow of checks or inability to secure cash could cause panic. To assure that there would be no such interruption in these functions—which vary widely and at times unpredictably—the System would either (1) have to be given wide discretionary authority by the Congress, or (2) would have to defend a budget of sufficient size to meet maximum possible needs. Grant of wide discretionary authority would defeat the purpose of subjecting the System to Congressional appropriations. Budgets designed to meet maximum needs, on the other hand, would tend inevitably to increase costs. Experience with the severe coin shortages in recent years demonstrates that deficiency appropriations are no dependable solution.

#### **H.R. 3783:**

The bill would retire Federal Reserve Bank stock and substitute certificates of membership. As a

purely *logical* proposition a Federal Reserve Bank could operate not only without capital stock and surplus but with a very large deficiency (*i.e.*, with liabilities far in excess of assets). The reason is that the only logical needs for assets are to secure earnings and to meet the claims of creditors as they arise. Since earnings are now far in excess of expenses, fewer earning assets would still be adequate to meet this need. The two large liability accounts are for Federal Reserve notes and member bank reserve deposits. There is no possibility that these accounts, which now total about \$50 billion will fall below, say \$30 billion—or even \$40 billion. Logically, no assets are needed to meet claims that will never be made, hence the Reserve Banks could operate logically with liabilities far in excess of assets. I develop this logic of the case to indicate that meaningful living involves more than logic.

Reserve Bank stock is a means of tying member banks and bankers more closely to the System. It provides a business-like method for electing six directors. Dividends on the stock are a partial offset against the lower earnings of member banks which result from their higher effective reserve requirements. Elimination of stock would make some observers restive because they would view it as indicative of a movement toward basic monetary changes such as nationalization of the banking system. There is no demonstrated need or prospect of benefit to offset these advantages of the change.

# HOW DOES OUR REGION GROW?

*The three states of the Third Federal Reserve District have grown at very different rates in the postwar period. Delaware and New Jersey might appropriately say, "How our region does grow!" Pennsylvania must retain the question mark, however, for a fair number of the forces which determine regional employment in the United States—though not so many as formerly—still do not favor Penn's Commonwealth.*

There is a fascinating paradox in the economic growth of the Third Federal Reserve District. The District contains the State of Delaware and a great deal of New Jersey and Pennsylvania. These three states, contiguous, highly developed, lying right in the middle of the nation's most densely populated region, are growing quite differently. In Pennsylvania, population, employment, and income are increasing less than in the nation, and this does not seem unreasonable. After all, the Northeast had a head start; now other parts of the country are moving ahead; it isn't likely that fast growth can be maintained everywhere forever. But move east a bit. Delaware and New Jersey are spurting ahead at rates substantially greater than the country. They too were early starters in the regional competition.

In an age when distance means less and less, in a country where foreigners remark on how alike people and places seem, how can regions so close together, almost of an age, and all with a history of intense economic development, grow so differently?

## **Determinants of regional growth**

A host of influences affect the way economic activities—buying, selling, production—distribute themselves among regions. In broadest

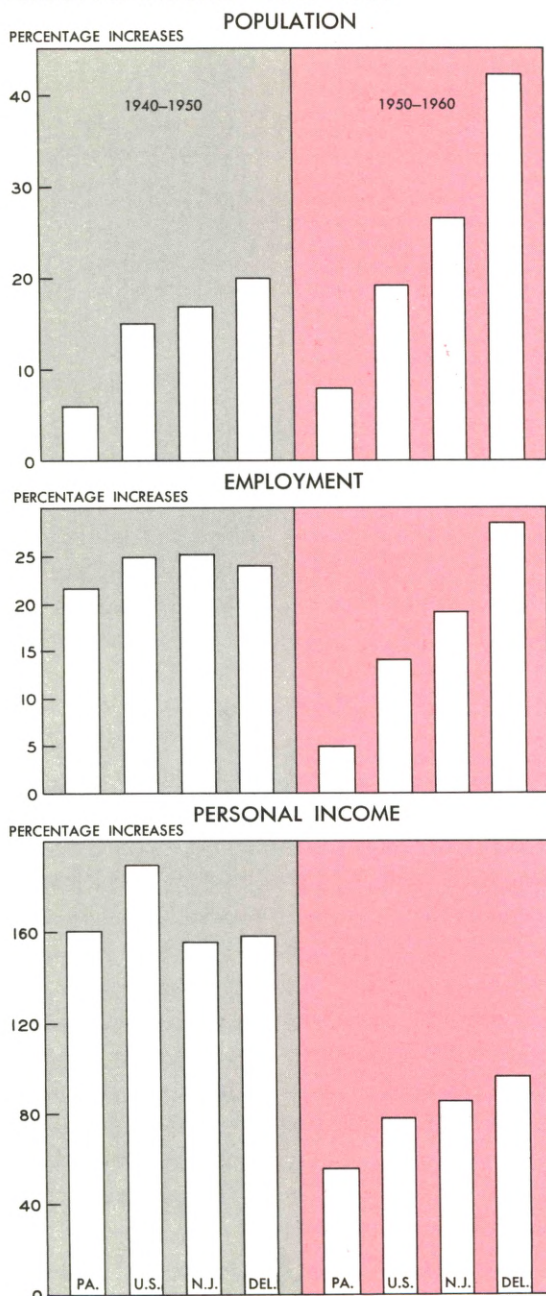
terms, the interplay between population movements and shifts of industry determines which regions shall have the fastest increases. Population draws industry, and industry draws people.

Start somewhere in time, with the nation's industrial establishments located according to the distribution of the resources industry requires: labor effort and labor skills, natural sites and materials, the productive equipment and plants created earlier by man. Differences in the growth of each region then can occur if population shifts, if technology changes, if plants and equipment wear out or natural resources become exhausted. A shift of population enlarges a market somewhere, and industry, seeking profits, establishes itself where it can serve the market. First, industries which make heavy things for consumers will grow up near the new market—construction is a good example. Then, industries which serve those industries will move in. Eventually, if the market and the industries serving it become large enough in scale, it will pay to build plants that can only operate on a large scale, such as steel mills. Big industries attract other industries, too; there are economies, in many lines, that go with just being where related producers are. The process becomes almost self-sustaining.

The same thing can happen sparked by a shift

*New Jersey and Delaware have been acquiring people, jobs, and dollars faster than the nation. Pennsylvania has not.*

**GROWTH OF POPULATION, EMPLOYMENT, AND PERSONAL INCOME—1940–1960**



of technology—a new discovery which creates plants near some resource essential to the new technology. The growth of steel-making is a good example. Areas like Pittsburgh, located at some optimal point between markets, ore, and coal, grew with steel technology. Now some of them are threatened by a combination of resource exhaustion, changes in technology, and population shifts which conspire to make new locations attractive.

Nothing is really quite simple, of course. The whole process works through an exceedingly complex network of interacting influences. One way to think about what influences regional growth is to try to specify all the interactions and all the determining factors, important, not so important, and of lesser weight still, and all the interconnections between stimulus and response. From such a massive effort may come a representation of the whole system in all its interrelationships, a detailed model which will enable decision-makers to trace the results that are likely to flow from given changes.

Some day, persistence, genius, analysis, and luck will produce such models. Meantime, community decisions have to be based on simpler attempts to isolate the fundamental influences that are important everywhere, and the specific factors that have great weight in particular regions. Regions must attempt to take advantage of factors which work in their favor, modify the effects of adverse forces where possible, and avoid wasting resources trying to fight unstoppable trends in technology, movements of population, and their consequences.

**The importance of change**

Decisions concerning location of industry are governed by how the world changes. In a phrase of economics, they are made at the margin.

When pros and cons are carefully balanced, a relatively small change—an increment in a cost, perhaps—can upset the balance. The cost increase may have been minor in the scale of a firm's operations, but profits, too, often are a small percentage. Profits are the goal; added costs take away profits; as cost increments pile up, they swing more and more decisions.

The Northeast,<sup>1</sup> which contains the Third Federal Reserve District, is itself mostly contained in the great Manufacturing Belt which holds nearly half the nation's industrial resources and population—the nucleus of America's productive strength. It is a massive, powerful economic region. But at the margin where decisions are made, it often is not the winner.

### The facts of redistribution

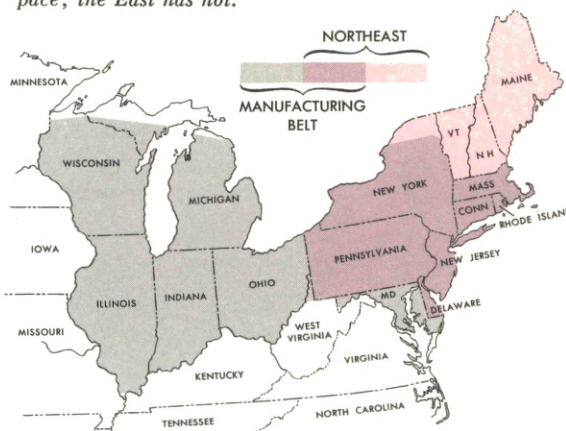
Population is growing less rapidly in the Northeastern United States than in any other part of the country. At the same time, changes in technology have tended to make many industries even more responsive than formerly to the pull of markets. The richest portion of the Northeast's still vast endowment of natural resources has been exploited; discoveries elsewhere, and new technology, have opened up other resource supplies.

The growth of the nation has made it feasible to put large-scale plants in regions which formerly were not large enough to support them. New plants are more efficient than old plants; this creates a competitive cost advantage for regions where important new capacity is built.

Within the Manufacturing Belt itself, these factors have been at work, too. Markets and industrial capacity have grown faster in its western portion.

<sup>1</sup> We have here, for convenience, added Delaware to the Northeast region as it is usually defined.

*The manufacturing belt contains almost half the nation's population and provides about half its jobs. The western part of the region has been growing at about the national pace; the East has not.*



All these changes add up to an over-all disadvantage for the Northeast in location decisions. It is not an absolute disadvantage; the region is and will continue to be an industrial heartland. But northeastern locations often turn out to be marginal ones in weighing the pros and cons of where to produce goods and services.

### The state of Pennsylvania

Pennsylvania has received the full impact of the forces working against the Northeast as an industrial location. An economic region lives by specializing in making products for which it is especially well adapted, and selling them to other regions. Such industries constitute an economic base; they are "export" industries in the sense that their products go to other regions (not necessarily foreign countries) in exchange for the specialized products of those regions. Pennsylvania's mix of export industries unfortunately inclines toward those which are no longer growing rapidly; some are even contracting. Mining is the most obvious case in point, but there are more.

The great bulk of activities which constitute a

region's economic base is in farming, mining and manufacturing. Other industries, such as services, finance, trade and construction, tend to live off the export industries they serve, or on the personal incomes generated in the first place by the export industries. In Pennsylvania, as in most parts of the nation, agriculture contributes proportionately less and less to the economic base. In mining, the state has borne the full brunt of technological change and, to some extent, of resource exhaustion.

The declining contributions of agriculture and mining have had repercussions on the state's strength as a market, and consequently on its attraction for market-oriented industries. Population has declined in many agricultural and mining portions of the state, or has increased very slowly, because of migration to areas—often out of the state—where jobs were more plentiful. The departure of vigorous young workers has damped the state's rate of natural increase. The net result: Pennsylvania's total population, and its pull as a market, have grown quite slowly.

The problem is intensified by the nature of Pennsylvania's distribution of manufacturing industries. These constitute the largest part of its export base, and the one part which is not declining. Fifteen years ago, only about two-fifths of the state's manufacturing activities were in rapidly growing industries such as machinery, chemicals and fabricated metals products. Decreases since then in the state's declining industries, particularly textiles and metals, operated to increase the proportion in growing industries to about 45 per cent. This figure is below the national proportion, and is substantially less than in Delaware and New Jersey. The mix of manufacturing activity in the state thus has remained on the side of slow growth, despite declines in

industries like textiles, which is now only about half as important in the industrial distribution as it was just after the war.

Pennsylvania's case was greatly influenced by a sequence of events which obviously cannot be traced to a single factor. Early in the sequence would come the effect on population growth of the state's losing comparative advantage in mining and some manufacturing activities. Resultant migration in turn affected rates of natural increase, and the growth of Pennsylvania's population dropped off sharply. Meanwhile technology was changing, incomes were rising, transport conditions changed drastically, and the consequent closer orientation of industry to markets reinforced the disadvantage of the state in the market-pull phase of competition for new plants. While it is certainly true that Pennsylvania's troubles stemmed in great part from input disadvantages—resource exhaustion and obsolescence—the effect of market growth elsewhere on the region's ability to pull in industry cannot be discounted.

Percentage of Manufacturing Employment, 1960, in Industries with National Increases in Excess of 20 Per Cent, 1950-1962

Region	
Pennsylvania	43
United States	54
New Jersey	61
Delaware	68

### **New Jersey and Delaware—luck, location and urban sprawl**

Economic activity in a disadvantaged region can redistribute into portions of it, causing strong growth in sections while the entire region may be slowing down. This happened in New Jersey and Delaware, and it happened apparently for a host of special reasons. Some of them can be clearly identified; some await much more detailed investigation than is possible here.

Both states had, and have, industrial distribu-

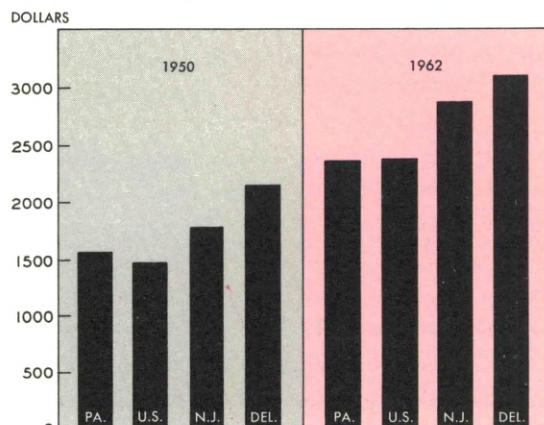
tions which lean strongly toward growing activities. Delaware has most of its eggs in one basket, the chemicals industry, although its rapidly increasing stake in transportation equipment has somewhat improved the state's manufacturing diversification. Farming in Delaware has retained a greater share of employees than it could in the other two states; it still constitutes a significant share of the economic base. This offsets a little the high-growth implications of the manufacturing distribution, but even so the state's basic activities are weighted toward growing industries.

In New Jersey, manufacturing is the basic activity. The industry mix is heavily on the side of high growth, with electrical machinery and chemicals alone accounting for more than one-quarter of all manufacturing employment in the state.

Undoubtedly it is an oversimplification to attribute a favorable mix of industry in a state to luck. Yet there is a considerable admixture of fortune involved in the fact that one of the world's best-managed and fastest-growing companies started out in Delaware rather than at some appropriate site in a neighboring state. In fact, fortune favors both states in their locations. They are directly in the urban corridor of the great metropolitan region that stretches down the Atlantic coast to Washington. They have important access advantages, to water as well as land carriers. Both states are small enough that these access advantages weigh heavily in the total reckoning of their competitive positions.

In the case of New Jersey, a very special factor operated to enhance its market potential. This was suburbanization. Lying between the metropolitan centers of New York and Philadelphia, in an age of rapid urbanization New Jersey became a net importer of income because

## PER CAPITA PERSONAL INCOME



it received much of the population which flowed to these centers. Population, and high-income population at that, draws industry. The sequence traced out for Pennsylvania worked in the opposite direction for New Jersey.

Delaware benefited also from exceptionally high rates of natural increase, associated with its higher percentage of rural population. Delaware's population grew in an interesting pattern. Relatively high rural population and associated high rates of natural increase ordinarily make for migration out of a region. Delaware, however, had considerable migration into the state—a good example of the pull that industrial growth can exert on population.

Region	Percentages of 1950 Population	
	Natural Increase 1950-1960	Net Civilian Migration 1950-1960
Pennsylvania	+ 12.3	- 4.0
United States	+ 16.7	+ 2.0
New Jersey	+ 13.5	+ 12.1
Delaware	+ 20.1	+ 18.4

### The sum of the observations

If there is a moral to this story of economic growth, it must be that having a vigorous lineup of export industries is essential to a region. Through the interaction of jobs attracting peo-



ple, and people, as markets, attracting more industry, a spurt of growth in the export sector can initiate a process that, in effect, feeds on itself. Pennsylvania has been passing through a sequence of this sort, but in the opposite direction. It has caused migration out of the state and inhibited growth. The other two states have been in upward phases, with people moving in and economic activity increasing at rates above the national average. Where do they now stand?

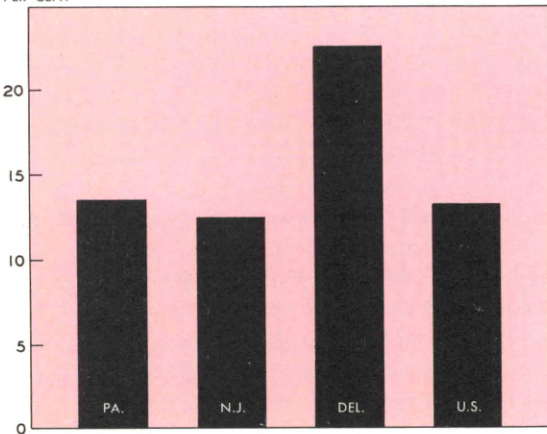
In Pennsylvania, the decline of mining, which was very important in initiating the sequence of growth-inhibiting shifts, has about run its course, but the state is left with a distribution of productive activity which, relative to other regions, does not especially lean to or away from the initiation of a growth sequence. The state also is not improving in relative market pull, having as it does less population growth than some other parts of its region. But with mine closings no longer pouring large numbers of people each year onto the labor market, the worst is over.

There comes a point in every downward phase of human activity—in the business cycle, in the

*Delaware has the highest proportion of property income in the nation.*

#### PROPERTY INCOME AS PERCENTAGE OF TOTAL PERSONAL INCOME, 1962

PER CENT



fortunes of a company or a person—when the causes of the downturn seem to have run out of steam. It is difficult at that point to perceive where the lift will come from to spark a recovery. Pennsylvania as an economic region may be nearing such a turning point. What might initiate a lift? There are several possibilities.

One is its open areas of natural beauty. Amenities of living are an increasingly important regional asset. With incomes high and growing, with more people footloose in the sense that they live on income, often as retired persons, with more companies footloose in that modern industry is less tied to resource inputs than formerly, a region can find that climate or other advantageous living conditions pull people and firms to it. Florida is an obvious case in point. Pennsylvania has many possibilities of this sort, lying as it does near regions of high income and high population density where recreational facilities are becoming ever scarcer.

Amenities certainly played a part in New Jersey. Suburbanization in a sense reflects a search for amenities. The appeal of the seashore helps explain why South Jersey has the highest population growth in the state.

The mix of industry in Pennsylvania, though still not on the side of growth, has moved a little in that direction since the war. The growing industries of today increasingly depend on research and educational institutions for intellectual maintenance and as suppliers of personnel. Pennsylvania has several educational centers which could act as magnets for industry, and efforts are underway in the state to exploit and to improve these assets.

The continued market appeal of New Jersey and Delaware is enhanced by their being importers of income. In Jersey, the suburbanites bring it back every night. In Delaware, it comes

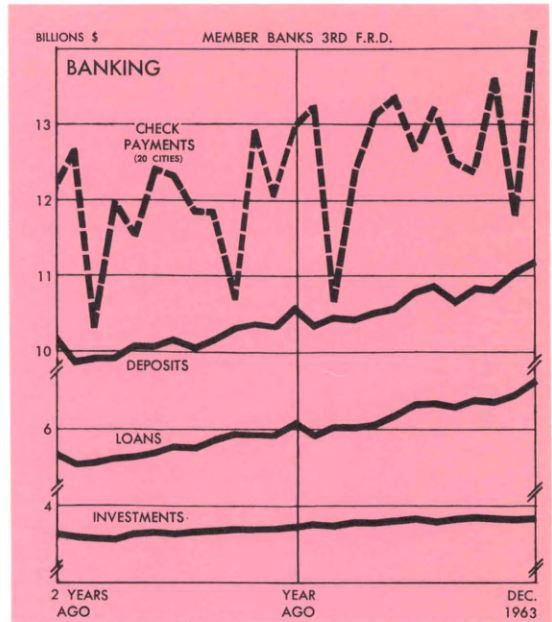
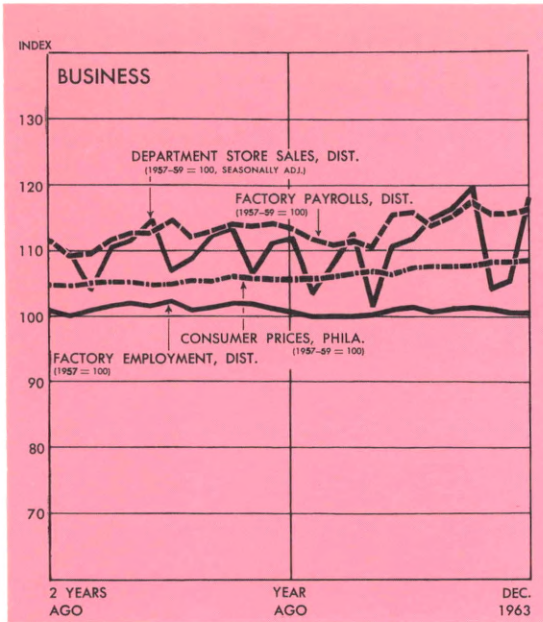
by mail—the state has the highest proportion of property income in the country.

Special factors—wealth, suburbanization, industrial distribution—produced growth in New Jersey and Delaware that exceeded what might have been predicted in view of their northeastern position in the country. It is quite possible that these forces may have had their greatest effect. Delaware particularly is vulnerable to any important changes in the competitive positions of

the few industries which make up its export base. By the same token, of course, it can receive a stimulus from favorable developments that would be submerged in the sheer size and variety of a larger state. New Jersey seems sure to benefit from further suburbanization, but probably at a slower rate. The state's strategic location in Megalopolis, however, and the accelerating development of its southern portion, seem to make statewide growth inevitable.

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# FOR THE RECORD...



## SUMMARY

	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	Dec. 1963 from		12 mos. 1963 from year ago	Dec. 1963 from		12 mos. 1963 from year ago
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago
<b>MANUFACTURING</b>						
Production.....	.....	.....	.....	- 2	+ 6	+ 5
Electric power consumed.....	+ 1	+ 2	+ 14	.....	.....	.....
Man-hours, total*.....	0	- 1	- 2	.....	.....	.....
Employment, total.....	0	0	- 1	- 1	+ 2	+ 1
Wage income*.....	0	+ 2	+ 1	.....	.....	.....
<b>CONSTRUCTION**</b> .....	-29	+10	- 1	- 9	+ 7	+10
<b>COAL PRODUCTION</b> .....	- 3	+ 6	+ 9	- 4	+ 9	+ 8
<b>TRADE***</b>						
Department store sales.....	+12	+ 7	0	+ 9	+ 9	+ 4
Department store stocks.....	0	+ 5	.....	.....	.....	.....
<b>BANKING</b>						
(All member banks)						
Deposits.....	+ 1	+ 6	+ 5	+ 2	+ 7	+ 7
Loans.....	+ 3	+ 9	+ 8	+ 2	+11	+11
Investments.....	0	+ 3	+ 4	+ 2	+ 2	+ 4
U.S. Govt. securities.....	0	- 6	- 2	+ 1	- 6	- 4
Other.....	0	+23	+20	+ 2	+21	+22
Check payments.....	+20†	+10†	+ 7†	+20	+11	+ 9
<b>PRICES</b>						
Wholesale.....	.....	.....	.....	0	0	0
Consumer.....	0‡	+ 3‡	+ 2‡	0	+ 2	+ 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 Dec. 1963 from		Per cent change Dec. 1963 from		Per cent change Dec. 1963 from		Per cent change Dec. 1963 from		Per cent change Dec. 1963 from	
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago
Lehigh Valley.....	- 1	0	- 2	+ 2	.....	.....	.....	.....	+21	+21
Harrisburg.....	- 1	0	+ 1	+ 3	.....	.....	.....	.....	+12	+21
Lancaster.....	- 1	- 1	+ 1	- 1	+ 6	+11	+ 1	+ 2	+ 8	+15
Philadelphia.....	0	- 1	0	0	+16	+ 5	+ 1	+ 4	+19	+12
Reading.....	+ 1	+ 2	+ 1	+14	+ 8	+12	- 2	+ 6	+12	+20
Scranton.....	0	0	+ 2	+ 5	+14	+ 8	- 3	+ 5	+16	+ 7
Trenton.....	- 1	+ 3	+ 1	+10	+10	+ 8	- 6	+10	+16	+ 7
Wilkes-Barre....	- 2	- 1	+ 1	+ 6	+ 7	+ 8	- 1	+ 5	+16	+ 7
Wilmington.....	+ 1	+ 5	0	+ 5	+10	+20	+ 2	+22	+45	- 6
York.....	+ 2	- 1	+ 4	+ 2	+11	+10	+ 2	0	+ 9	+ 9

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