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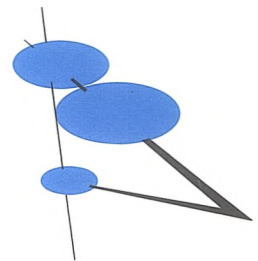
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# Monthly Review

Annual  
Review  
Issue



February 1970

Contending Forces

Tightest Ever?

Watershed Year

Tight Money Revisited

Disintermediating Year

Slowdown Revisited

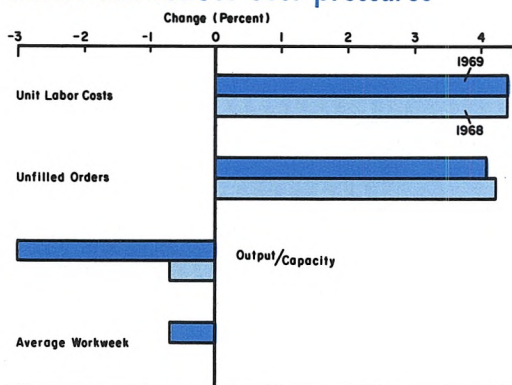
Challenging Year

Checklist of '69





**Some indicators turn sluggish, but others still reflect cost pressures**



The year thus encompassed only the first stage of a two-stage adjustment process—a slowdown in the spending trend which necessarily precedes a slowdown in the price trend. The cost increases built into most wage contracts and purchasing commitments continued to cumulate during 1969. As 1970 opened, however, a combination of below-capacity operations and heavy carrying costs for inventories increased the pressures for competitive price adjustments.

**Investment strong**

The strongest element in the 1969 economy was fixed-investment spending, which jumped more than 10 percent, to \$99 billion, as against a 6-percent increase in 1968. This business-spending upsurge continued throughout the entire year, and it added substantially to the nation's stock of machinery, equipment, bricks, and mortar. Even so, about 4 percent of this gain represented price increases, in contrast to the 3-percent increases in each of the two preceding years, and in striking contrast to the near-stability in prices in the early years of the decade.

The demand for new business facilities increased at a time when the usual determinants of business investment pointed to some weakening in demand. Along with the business slowdown, capacity utilization declined

and corporate profits (and cash flow) fell off. Along with the policy restraint, new financing became hard to find, and the cost of money and equipment in some cases became prohibitive. Moreover, a near-certain repeal of the investment tax-credit created an unfavorable outlook for future capital-goods costs.

In the face of those drawbacks, businessmen plunged ahead and spent record sums for new plant and equipment. Some firms added to the spending totals simply by ordering, under normal schedules, complex new equipment requiring long lead times in production. Other firms ordered heavily because they planned on the basis of the long-term growth trend in their markets and paid little attention to what they regarded as the diminishing possibility of a severe recession. Still others, however, ordered their future capital equipment in 1969 because they felt that prices prevailing then would be much lower than those prevailing in the 1970's.

**Government sluggish**

The Federal government, which had contributed even more to the inflationary boom of the late '60s than the business-investment sector, expanded its purchases of goods and services by only 2½ percent in 1969, to \$102 billion. This increase contrasted strikingly with the 10- to 20-percent increases posted in the three preceding years. And with a sharp 6-percent jump in prices of government purchases, the Federal government purchased, for more money, a smaller volume of goods and services than it had bought in 1968. At the state-local level, meanwhile, spending jumped about 12 percent—as usual—with about half of that representing more goods and services and half representing higher price tags.

The government sector was marked by a definite downtrend in defense spending. (The 1969 total exceeded the 1968 figure only



because of a mid-year boost in Federal pay rates.) The downtrend indeed may continue for the next several years, despite the Pentagon's lengthy shopping list for new military hardware, as the share of GNP budgeted to defense spending may be smaller in fiscal 1971 than in any other year of the last two decades.

### Consumer wobbly

The hard-beset consumer—faced with a 10-percent surtax on income, stiff credit terms for big-ticket items, and higher price tags on almost all items—responded in somewhat predictable fashion. He paid the higher prices required for necessities, cut back on spending for postponable items, and meanwhile saved less of his income than usual in an attempt to maintain his customary standard of consumption. Savings amounted to 6 percent of disposable personal income in 1969, as against a 6½-percent savings rate, or better, in each of the three preceding years.

Many people, of course, spent money with abandon—witness the Scarsdale millionaire, the first folk hero of the '70s—but the average consumer last year handled his money

with an almost peasant-like caution. Especially in real terms, average consumer spending grew quite sluggishly.

The average worker fought hard at the bargaining table to maintain (if not advance) his customary living standards. In major contract settlements negotiated during 1969, union workers obtained an 8.2-percent annual increase in wages and fringe benefits, as against a 6.6-percent gain in 1968 and a 5.5-percent gain in 1967. But such settlements helped precipitate further boosts in prices. Even then, the individual consumer's income, after adjustment for higher taxes and higher prices, increased only about 1 percent during the year—considerably below the 3- to 5-percent gains recorded in all the preceding years of the decade.

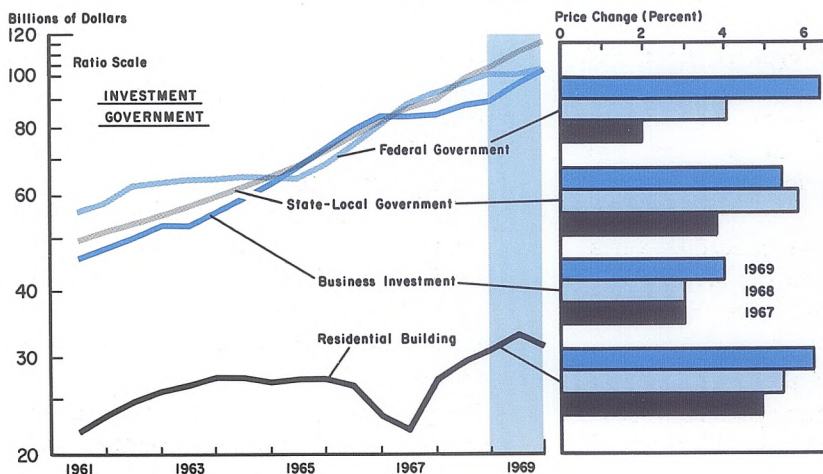
### Rising aggregates

In the aggregate, consumers boosted spending for nondurable goods by 5 percent, to \$243 billion. Still, practically all of this gain was eaten up by higher prices; for instance, food prices jumped 5 percent, more than they did during 1966's farm supply shortage. In addition, consumers expanded spending for services by 9 percent, to \$242 billion, but

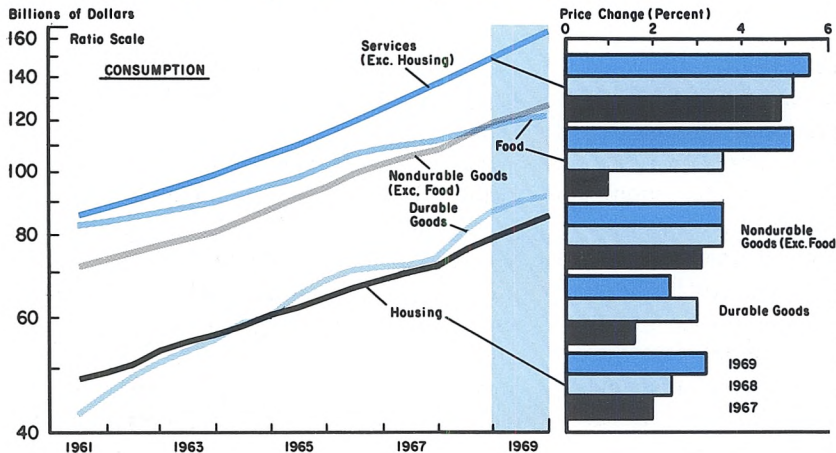
over half of this represented higher price tags, as the average price of services increased 5 percent for the second straight year.

Consumers also boosted spending for durable goods by 8 percent, to \$90 billion. All of the sales increase was concentrated in the first half of the year, as the second half saw an easing in demand for new

### Business investment alone shows substantial strength in 1969, but all sectors suffer from price inflation



**Consumers boost spending considerably during year, but much of gain represents only higher pricetags**



cars, color TV sets, and furniture. (Here could be seen the workings of policy restraint; in this slowdown, the average annual price increase for durables dropped from 3 percent to 2 percent.) Yet, despite the sluggish pace in the final months of the year, new-car sales almost matched the strong 1968 figure. Sales of U.S. cars fell roughly 2 percent to 8.5 million units, but sales of imports jumped 10 percent to 1.1 million units, with Japanese cars accounting for the vast bulk of that increase.

**Falling housing**

In the residential-construction sector, consumers increased their spending by 6 percent to \$32 billion. Still, this was entirely a price phenomenon, since construction costs jumped over 6 percent during the year, outstripping the sharp price gains of the 1967-68 period. And although new housing starts averaged 1.5 million units, equaling the 1968 average, building activity dropped one-third between

the beginning and the end of the year.

Underlying pressures for a potentially strong demand continued to develop during 1969—for example, the beginning of a substantial boom in marriages and the decline in vacancies to lower than usual levels. But with housing price tags rising faster than prices generally, and with mortgage financing increasingly difficult to obtain, these potentials failed to show up in actual purchases of new residences.

What then of 1970? A policy-imposed slowdown on output is already here, and the next scene, according to the policy script, will unveil a slowdown in prices. But some pessimistic opinions have been expressed on this score; former Presidential adviser Walter Heller, for example, suggested recently that the U.S. economy will be lucky to average less than a 3-percent pace of inflation throughout the next decade. In his words, "Even when we get past the epidemic phase of inflation, it will still be endemic in the U.S. economy."

This may be too pessimistic a diagnosis; inflationary problems have been overcome before in the nation's history. Even so, if the 1970's are to become a model of price stability with full employment, the economy will require a great deal of self-restraint on the part of all sectors in the economic drama.



## Tightest Ever?

To the businessman seeking to borrow money to carry inventories or to expand plant capacity, and to the prospective homeowner scrounging for mortgage funds, the suspicion may have arisen that money was tighter in 1969 than at any other time in recent history. And indeed, there is some basis for this opinion. The Federal Reserve pursued, throughout all of 1969, the policy of active restraint which it adopted in late 1968. Fiscal policy was also restrictive; the Treasury was in the black in every quarter of the year, registering the largest annual surplus since 1947.

Thus, monetary policy and fiscal policy individually were more restrictive than in any other recent year, and together they presented the most stringent public-policy package in decades. The results of this restraint showed up in a heavy pressure upon bank reserves, a much slower rate of bank-credit expansion, and record-high levels of interest rates.

### Surplus: high-water mark

The Federal budget staged a most remarkable turnaround between mid-'68 and mid-'69—a swing of over \$23 billion, to be precise. From a \$9½-billion deficit in the second quarter of 1968, the budget went to a \$13½-billion surplus in the second quarter of 1969, at annual rates, primarily because of the 10-percent tax surcharge on corporate and personal incomes. From that high-water mark, however, fiscal policy began to move away from restraint and towards expansion. The surplus was halved in second-half '69 because of the Federal pay raise and other expenditure boosts, and it will probably disappear altogether in the present six-month

period because of a reduction in the surcharge and an increase in social-security benefits.

The Treasury surplus in calendar 1969 enabled it to retire over \$5 billion of debt in the hands of the public, compared with net borrowings of over \$6 billion in 1968. The 1969 figures by themselves would indicate that the Federal government was a net supplier of funds to the market, and that it thus helped to ease upward pressures on interest rates. These figures, however, do not take into account the actions of a number of Federal agencies, principally those concerned with the housing market, whose debt transactions are no longer included in the Federal budget.

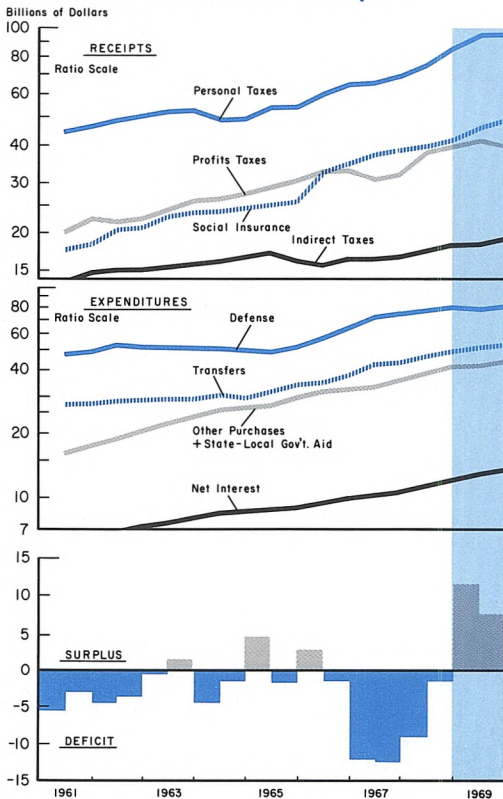
Agencies were net borrowers of over \$8½ billion in 1969—much of it in the second half of the year, when the Treasury itself was meeting most of its seasonal needs for cash. As a result, the Treasury and the agencies combined were net borrowers for the year, and the concentration of their demands for funds in the second half of 1969 exerted a very considerable upward pressure on interest rates.

### Tight all the way

The tightening of monetary policy that began in December 1968 was accomplished through the traditional instruments of control—but with some embellishments that represented responses to innovations introduced by the larger money-market banks. The discount rate was increased from 5¼ percent to 5½ percent in December 1968, and then raised again to 6 percent in April 1969. In April, too, reserve requirements against demand deposits were raised by ½ of 1 percent for both reserve city and country banks.



**Tax surcharge causes budget to shift from deficit to surplus**



Open-market operations were also used throughout the year to maintain pressure upon the reserves of the banking system, forcing banks to increase their indebtedness to the Reserve Banks.

Still, the most effective instrument of monetary control was one which was used in a passive rather than an active fashion—that is, Regulation Q, which sets maximum interest rates payable upon time-and-savings deposits. All through 1969, these maximum rates remained at the levels set in April 1968, even though yields on competing short-term investments had moved above the Regulation Q ceilings as early as December 1968.

Throughout 1969, then, commercial banks lost substantial amounts of large-denomination negotiable certificates of deposit (CD's);

the total runoff amounted to more than \$13 billion, or well over one-half of the total held at the beginning of the year. In the face of such a loss of funds, banks moved to replace the CD's by various devices, including borrowing in the Federal-funds market, borrowing Eurodollars from their foreign branches, and issuing commercial paper through their parent bank holding companies.

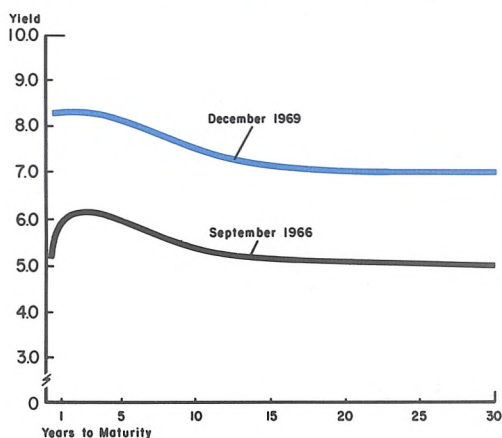
The Federal Reserve responded to the use of Eurodollar borrowings and the sale of commercial paper by extending the coverage of Regulation Q and Regulations D and M, which deal with bank reserve requirements and deposits. In October, reserve requirements of 10 percent were placed against those advances of Eurodollar balances by foreign branches which were in excess of the outstanding balances in a given base period. By the end of the year, the Federal Reserve proposed to bring commercial paper sold by bank holding companies and affiliates under the reserve requirements of Regulation D and the interest-rate maximums of Regulation Q. Federal-funds transactions between banks and corporations meanwhile were restricted by narrowing the definition of such transactions permitted to escape these general regulations.

All of these measures tended to reduce the access of banks to sources of funds that had not previously been subject to regulation. Whether regarded as "loopholes" or as "safety valves," these sources of funds became objects of regulation because they enabled banks to escape some part of the policy pressure upon their reserve positions.

**Tightness: '66 vs. '69**

It now seems clear that the tight money period of summer '66 cannot hold a candle to summer '69—or even less to '69 as a whole. With the single exception of the

### Yield curve for Treasuries in '69 stood well above peak '66 levels



money supply, all monetary aggregates showed a much greater degree of restraint in the second half of 1969 than in the comparable period of 1966. The money supply grew at a 0.6-percent annual rate in the second half of 1969, as against a 1.0-percent decline in the comparable period of 1966. On the other hand, time-and-savings deposits declined by a 6.5-percent rate in the more recent period as against a 2.5-percent drop in the earlier period, while member banks' net borrowed reserves were \$948 million in second-half '69 as against \$322 million in second-half '66.

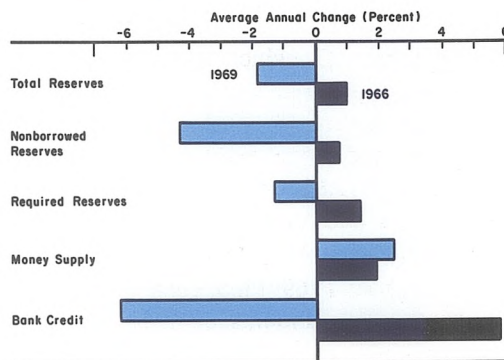
A comparison between the two years as a whole is even more striking. Monetary aggregates actually increased in the full year 1966, as the expansion of the first six months more than offset the restraint of the second half. In contrast, monetary policy tightened sharply in the first half of 1969, so that the figures for the year as a whole present an overall picture of severe restraint. It can be argued that the duration of a policy of monetary restrictiveness is just as important as the intensity of restraint. If this is so, then 1969—much more than 1966—should go down in the history books as “the year of the big squeeze.”

### Higher than ever

Finally, 1969 must be rated a frustrating one for the chronicler of interest-rate developments, since there are only a finite number of superlatives to describe the “new,” “record,” “high,” “peak” levels that were reached during the year. In the last week of the year, the yield curve for Treasury securities stood well above the peak reached in the September 1966 “crunch,” with the longest issues returning more than the shortest issues did in 1966. The 8.10-percent yield posted on 91-day Treasury bills in the auction of December 29 would have been considered excessive in any sector of the money market in any year but 1969.

The highest levels of yields were reached, in most cases, in the very last week of 1969. Provisions of the new tax-reform bill dealing with bank treatment of capital gains on securities caused a heavy selloff of longer-term Treasury issues by banks, and thus boosted yields on these securities to their highs for the year. Yields on corporate bonds also reached their '69 peaks in the last week of December, because of the very heavy volume of new issues coming onto the market at that time. In the tax-exempt sector, yields

### 1966 was bad enough—but 1969 was even worse





on outstanding issues ended the year well above the 6½-percent level, even though the volume of new issues was held down by interest-rate ceilings.

In the short-term area, rates rose sharply in the third quarter as banks bid vigorously for funds in the Federal-funds and Eurodol-

lar markets. The yield on Treasury bills also advanced in the same period, but the record rates in that sector were reached in the last week of the year, because of heavy selling by foreign holders of bills, and also because of dealers' inventory reductions triggered by rising finance costs.

## 1970—First Policy Moves

**I**n late January, the Federal Reserve Board of Governors raised the maximum interest rates that commercial banks can pay on time deposits under the Board's Regulation Q. On ordinary time deposits, it raised maximum rates from a range between 4 and 5 percent to a range between 4½ and 5¾ percent; on large negotiable CD's (\$100,000 and over), it raised maximum rates from a range between 5½ and 6¼ percent to a range between 6¼ and 7½ percent, depending on maturity. The higher maximums may help stem the very serious outflow of funds from large CD's—these deposits have dropped from \$24 billion to \$10½ billion since December 1968.

The Federal Home Loan Bank Board thereupon moved, albeit "reluctantly," to authorize savings-and-loan associations to pay higher interest rates on a wide variety of savings instruments. S&L rates remained slightly higher than those of commercial banks on ordinary time deposits, but matched bank rates on large time deposits of \$100,000 and over.

The Federal Reserve Board also announced that it is considering a 10-percent reserve requirement on funds obtained by member banks through the issuance of commercial paper or similar obligations by bank affiliates, including a member bank's parent company. (Commercial paper issued by bank holding companies or their affiliates jumped from \$1 billion to \$4 billion in the last half of 1969.) But in late February the Board announced that it had decided to defer action at this time "in order to avoid additional stringency in money and credit conditions."

In announcing these first major policy measures of 1970, the Board said, "The dual moves were taken within the framework of continued over-all credit restraint and were based on these considerations: a rebalancing of the Board's regulatory structure in the light of recently expanded authority in this field and developments in financial markets; a readjustment of structure of maximum interest rates payable by commercial banks for deposits to bring it somewhat more in line with going yields on market securities; the need for greater equity in the rates that may be paid for smaller savings balances, and a desire to encourage longer-term savings in reinforcement of anti-inflationary measures."



## Watershed Year

Historians generally look back upon 1929 as a “watershed year”—a time when an old order of things reached a climax, and a new one was born. Students of international finance may well look upon 1969 as another such year, since developments in exchange markets, in gold, and in international financial institutions point to a fundamental change in the international order.

### Dimensions of progress

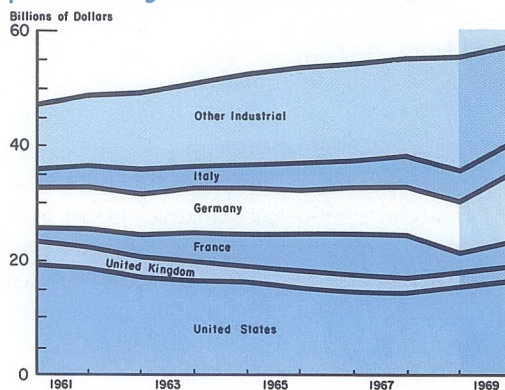
Today’s international monetary framework was established with the general resumption of convertibility in 1959. After some minor alterations in the early ’60s, the pattern of rates held quite firm for the better part of the decade, but then began to collapse in 1967. This led to a series of parity adjustments: in 1967, the sterling devaluation, and in 1969, the 11.1 percent devaluation of the franc and the 9.3 percent revaluation of the deutschemark.

These parity changes were carried out with less perturbation than might have been expected. Central bankers evidently benefited from the 1967 sterling experience and the 1968 gold-pool crisis. The franc devaluation, in particular, was managed with a finesse that caught speculators off guard and minimized disruption in the exchange markets. The German action in floating the mark prior to formal revaluation was an imaginative move which succeeded in easing a mounting exchange crisis while meeting various problems associated with a change of government.

These currency realignments, along with the earlier devaluation of the pound, relieved the stresses and strains associated with currency maladjustments and contributed notably to calmer and more stable exchange market conditions. As a result of these changes and of associated policies, the pound has gained strength, enabling the British to reduce their external debt; French reserves have shown some tendency to rise; and German reserves, although greatly reduced from their speculative peak, are still at quite acceptable levels.

Following the parity changes, negotiations within the Common Market broke previous impasses. British membership in the EEC seems more likely now that France has altered its unalterable opposition. Another important result of these negotiations was the establishment of a “mini-Fund” to help recycle speculative flows within the EEC.

### Germany (until late '69) and U.S. post strong increases in reserves



Japan emerged last year with the second largest GNP in the western world. This impressive performance was sustained by a healthy export sector; in 1968-69, for the first time in many years, Japan was able to enjoy substantial external surpluses along with very rapid growth.

Japan's growth, however, has been accompanied by a higher degree of inflation than would be considered acceptable in the U.S., not to mention Europe. At present, Japan is spared external constraints on its expansionary growth policy because the effects of inflation on Japan's international competitive position are offset to a considerable degree by inflation in other countries. Though a part of Japan's external surplus can be traced directly to transactions in support of American armed forces in Asia, it is questionable whether even success in America's Vietnamization policy will seriously hurt Japan's balance of payments; the U.S.-generated inflation that helps to support Japan's payments surplus seems to be even more difficult to de-escalate than the war that caused it.

### Capital mobility

The theoretical issues raised by the presence or absence of international capital mobility have been increasingly overcome by events. International mobility of short-term capital is a fact, and its name is Eurocurrency. The Eurocurrency market, after a fantastic growth in 1969, probably amounts now to \$35-\$40 billion—roughly half as large as the world's total gross monetary reserves.

Nonetheless, the high mobility of Eurodollars—the major Eurocurrency—has created some problems for U.S. and other monetary authorities. During 1969, American banks borrowed Eurodollars heavily, largely as a reaction to the Federal Reserve's tight-money policy—including Regulation Q ceil-

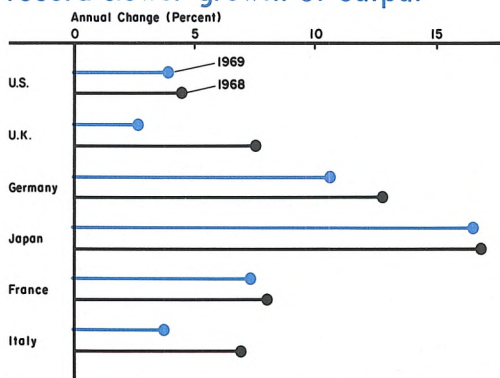
ings on rates that banks may pay for funds from domestic sources. However, this growth in borrowing tapered off abruptly when the Federal Reserve imposed reserve requirements on Eurodollars borrowed by U.S. banks from their foreign branches. Yet, while the borrowing of money for use in the United States tended to work against the general trend of domestic monetary policy, American firms' borrowing of long-term money in the Eurobond market for foreign expansion was encouraged because it supported U.S. balance-of-payments policies.

A large portion of new Eurobond flotations in early 1969 took the form of convertible issues. But in April, as the New York stock market started to decline, convertibles fell out of favor, and the widespread belief in a deutschemark revaluation made DM-denominated issues extremely popular. (In return for the borrower's exchange risk, rates on these issues were often several percentage points lower than those on dollar-denominated issues.) Finally, after the revaluation of the DM, the market began to turn again to the dollar as the unit of account for Eurobond issues.

### Shift in U.S. balance

The increased mobility of international capital has helped to prove to the world what

### Most of major industrial nations record slower growth of output





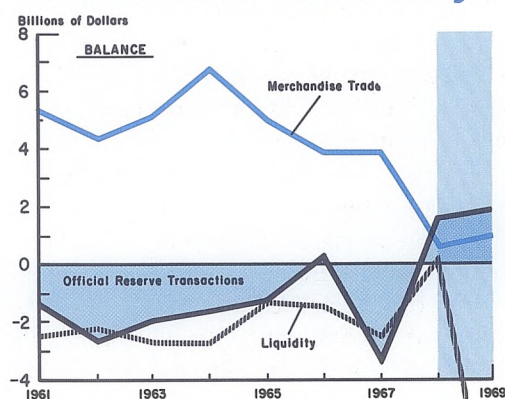
was once considered merely the self-serving opinion of a few American economists: that this country's role in international finance is a very special one, and that the standards of rectitude applicable to a reserve-currency country need not properly be the same as those applicable to other countries. It may be no coincidence that the U.S. balance of payments has generally been strong in recent crisis periods.

Even so, the situation in 1969 was ambiguous to the layman because of the especially wide divergence between the two major measures of the U.S. balance of international payments. The official-settlements balance—plus \$2.78 billion—showed considerable strength, while the liquidity balance—minus \$6.99 billion—showed something else again. The official settlements balance includes certain nonliquid U.S. liabilities to official foreigners, while the liquidity balance excludes those items but includes liquid liabilities to private foreigners and to foreign central banks.

Heavy borrowing by U.S. banks from the Eurodollar market increased Eurodollar rates which stimulated a flow of U.S. and foreign official dollars to the Eurodollar market, thus increasing the U.S. liquidity deficit while enhancing the official-settlements surplus. But the process began to reverse itself in midsummer, after the Federal Reserve moved to decrease the attractiveness of the Eurodollar market as a source of member-bank reserves. In the third quarter, the official-settlements balance showed a deficit for the first time since early 1968, while the liquidity balance posted a reduced deficit and then (according to preliminary reports) moved into surplus in the final months of the year.

The U.S. slightly improved its merchandise-trade balance, but this (although encouraging) was far below the annual surplus of \$5 billion or so recorded in every year of

## Trade surplus remains weak, but official-settlements balance strong



the mid-decade. Contributing to increased outflows was a rise in the rate of direct investment abroad, from about \$3 billion to \$4 billion a year. In the other direction, foreign purchases of U.S. securities exhibited wide fluctuations, generally reflecting the state of the New York stock market. Until the market decline last spring, such purchases ran about \$1 billion per quarter, but they then fell to only about one-third of that figure later in the year.

## Cooperation — behind the scenes

Dramatic features of the developing new era lie in the realm of inter-central bank cooperation. Some of these joint efforts, such as the creation of Special Drawing Rights, took place in the public eye. Equally important activities were sequestered behind closed doors.

For example, meetings held at the time of the Franco-German currency crisis of late 1968 (and subsequently) led to the parity changes of 1969. These conferences enabled France and Germany to ascertain how large a change each could make without inviting competitive changes that would vitiate their own actions. Furthermore, they enabled the authorities to assemble packages of support for the beleaguered currencies, so as to foil



## FEDERAL RESERVE BANK OF SAN FRANCISCO

speculators and leave the discretion as to timing up to the countries involved.

In this connection, central bankers have now come up with a new counter-speculative device — recycling — whereby countries receiving an influx of international liquidity re-lend it to the losing countries. The concept, born out of the German crisis, is already attaining a more formal existence in the new EEC “mini-Fund” package.

Negotiations between the U.S. and South Africa, both bilateral and within the IMF, resolved the loose ends remaining from the two-tier gold arrangement of 1968. South Africa intends to sell its newly mined gold on the free market as its balance of payments require. However, when the free-market price is at \$35 or below, South Africa shall have the right, under certain restrictions, to sell its output for that period to the IMF. Other provisions in the agreement regulate the use of South Africa’s monetary gold stock and allow South Africa to use gold incident to other IMF operations. South Africa will restrict its gold dealings to IMF and the private market.

### — and on stage

The development that really gave 1969 its “watershed” status was the creation of Special Drawing Rights (SDRs) in the International Monetary Fund. The so-called “paper gold” will start off modestly, but may in time become the prime international reserve medium. The success of SDRs will depend on how well they combine the relative advantages of gold and convertible currencies, which are the legal tender required by central banks to intervene in the exchange markets and fulfill their international obligations under the rules of the IMF.

The IMF made its first distribution of this

new international-reserve asset by allocating \$3.4 billion in SDRs at the beginning of 1970. Roughly one-fourth of the total went to this country, and other large sums went to other industrial nations. (The U.S. Treasury will account for its SDRs in much the same way as it accounts for its gold holdings.) The IMF now plans to distribute \$3 billion in SDRs at the beginning of each of the next two years.

Under present arrangements, Special Drawing Rights will serve a limited but nevertheless vitally important function, backing up working balances of dollars and other convertible currencies. The U.S. will probably maintain a passive posture with SDRs, offering them as an alternative to gold to nations desiring to convert their excess dollar holdings, and accepting them in exchange for replenishing dollar balances of foreign central banks.

Special Drawing Rights can be expected to serve a useful function in maintaining a satisfactory level of what the IMF calls “reserve ease.” In general, this means that SDRs will be issued in sufficient quantities to insure a large enough and sufficiently growing stock of reserves, so that countries enjoying balance-of-payments surpluses will feel amply supplied with reserves and not pursue the kind of restrictive policies that increase the burden of adjustment on the deficit countries.

In sum, last year witnessed a realignment of exchange rates, a greater flow of funds in international capital markets, and a growing understanding of the U.S. role in providing liquidity to those markets. The year also witnessed a growing sophistication of central bankers, reflected in the expansion of central-bank swap arrangements, in the development of recycling operations, and in the creation of “paper gold.”

## Tight Money Revisited

**H**eavy business demands for funds clashed with restrictive monetary policy to make 1969 a year of stress and strain in the financial markets. The year began with interest rates at record or near-record highs—and it ended with still higher rates.

But despite the fantastic cost of money in 1969, the total amount of new funds raised in the financial markets fell only to \$86 billion, or just about \$10 billion less than the 1968 record. (The estimates, based on flow-of-funds data, are still preliminary.)

On the demand side of the market, total financing remained high because of heavy borrowing by nonfinancial business. Funds raised in this sector increased by about one-quarter over the 1968 figure, and business thus accounted for over half of the total funds raised during the year. In contrast, net borrowing declined on the part of the U.S. government and its agencies, more than offsetting the sharp increase in the business sector.

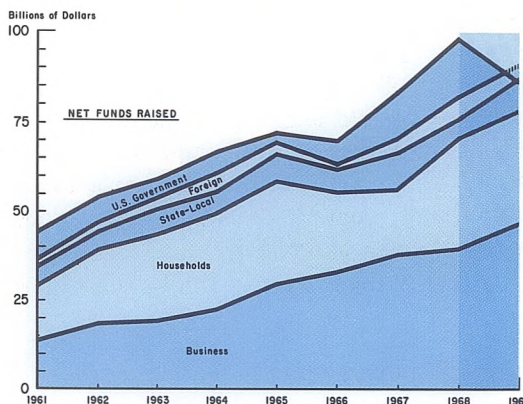
### Business demand soars

Total business capital expenditures totalled \$111 billion—\$12 billion over the record 1968 level—and thus generated an enormous demand for external as well as internally-generated funds. The existence of heavy business demands for funds was not surprising, but the size of those demands was indeed startling. Altogether, the net amount of funds raised by business in the financial markets reached a record \$47 billion in 1969.

Internal sources of corporate funds amounted to \$64 billion, hardly any more than the 1968 figure, since a \$2-billion rise in before-tax profits was offset by higher corporate taxes and dividend payments. This failure of internal funds to grow shifted the full burden of heavier corporate-investment spending onto the financial markets.

Corporations relied upon the securities markets as their principal source of outside funds. On a gross basis, corporate long-term security offerings set a new record of almost \$28 billion, despite the rise in interest rates to record levels. (On a net basis, new issues provided almost \$15 billion in funds.) Common and preferred stock issues amounted to \$8½ billion—almost twice the 1968 figure—and the remaining \$19 billion came from bond sales.

### Business demand puts heavy pressure on financial markets in 1969



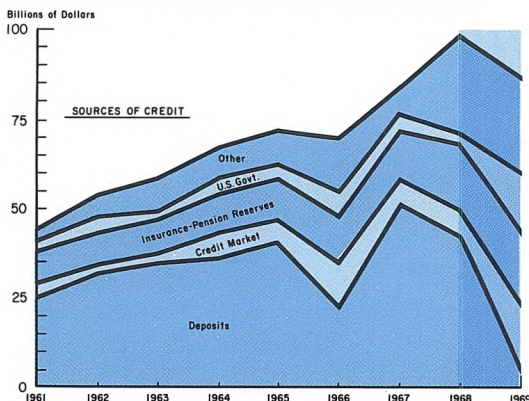


The bond markets provided the clearest indication of the pressures on the financial system. The yield index for Aaa corporate bonds reached 7.84 percent at the end of December, in contrast to a year-before figure of 6.45 percent, and 9-percent rates on new issues were common at year-end.

Corporations received additional finance through commercial bank loans, \$9 billion, and through mortgages, \$4 billion. Neither of these figures was much higher than in 1968, although the prices paid were markedly higher. So to meet the remaining part of their financial needs, corporations were forced to turn to other sources—in particular, to the commercial-paper market.

The intensive reliance on the commercial-paper market was indeed a major feature of the financial year. By the end of November, the total amount outstanding reached \$33 billion, for a \$13-billion increase in a single year. Prominent in this upsurge were the commercial banks, which entered this market through their one-bank holding-company parents. In the last half of 1969 alone (the first period in which these dealings were reported), bank-related paper went from about \$1 billion to over \$4 billion, and helped fill the gap left by the decline in bank deposits, their normal source of funds.

### Bank deposits fail to provide funds, so borrowers turn to credit markets



None of the other private sectors was a factor in the expansion of financial demand. Households, the major borrowing sector in 1968, actually declined slightly during 1969 to about \$31 billion. In this category, home mortgages increased by \$1 billion to about \$16 billion for the year, even in the face of rising rates and shortages of funds, while net instalment and other consumer credit fell more than \$2 billion to about \$9 billion.

### Government demand slumps

The major decline in financial demand reflected the policy shift from an expansionary to a restrictive fiscal policy. In 1969, the Federal government and its agencies were net lenders of \$6 billion in the financial markets, as against \$13 billion in borrowings in the previous year. This reduction in borrowing was the obverse of the Federal government's policy of increased fiscal restraint. Without this shift, the strains on the financial system would have been even more severe.

Independent Federally-sponsored agencies, such as the Federal Home Loan Banks and the Federal National Mortgage Association, were important direct borrowers during the year. These agencies, in effect, obtained funds to provide financing to financial institutions and individuals whose normal sources were impaired as a consequence of general monetary restraint. Since the agencies' lending almost matched their borrowing, their operations appeared small on a net basis. But their gross demands on the capital markets were substantial—\$9 billion in 1969 as against \$3 billion in 1968—and thereby reinforced the pressures on rates in the markets where their securities were issued.

State and local governments, like the Federal government, cut their net borrowing during the year. The net total dropped \$1 billion to a \$9-billion figure, but gross proceeds dropped \$5 billion to a \$12-billion total.



While the Federal decline was in effect a part of the fiscal-monetary stabilization policy, the state-and-local decline was more the result of that policy. The sharp drop in their proceeds reflected their vulnerability to the high interest rates associated with a restrictive monetary policy, since many of them are subject to legal restrictions on the interest rates they can pay on new issues. The Federal government itself has a rate ceiling on its long-term issues, but it has the option of raising funds through short-term issues in years of high interest rates. For many local governments, there is often no way of avoiding rate ceilings, so that high rates mean that issues simply cannot be sold.

With these pressures operating in the market, the rates paid on outstanding state-and-local issues climbed to record levels, reaching a 6.91-percent yield for seasoned municipal bonds in December. Furthermore, uncertainty about the future treatment of the tax-exempt status of municipal securities tended

to reinforce this upward pressure on rates. The differential between corporate and municipal-bond rates narrowed from 1.70 percent in January to 1.21 percent in December, and this differential was even narrower at certain times during the year.

Although education issues absorbed the largest share of state-and-local funds, their share of the total fell from about one-third in 1968 to just one-quarter in 1969, largely because of the effect of interest-rate ceilings. Transportation issues, on the other hand, increased from about one-sixth to one-fifth of the total. But industrial-aid issues, which had formerly been widely used by local governments as a means of attracting new industries, dropped very sharply in 1969 because of the removal of tax exemption for large issues of this type, and for all practical purposes disappeared as a major source of demand.

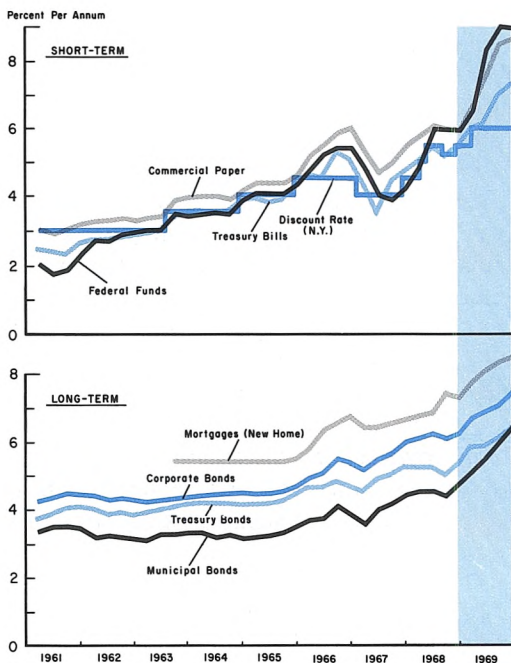
### Supply side reflects strains

The changing positions in the market of the various suppliers of funds testify eloquently to the financial strains which developed over the course of the year. In particular, the impact of monetary policy was apparent in the restricted role of the commercial banks as suppliers of funds. Non-financial sectors, usually of minor importance on the direct supply side of the market, became the major source of the additional funds demanded by borrowers.

High interest rates served the function of attracting funds directly from lenders who normally are only indirect providers of funds. In this sense, 1969 was a repetition of 1966, when another peak in interest rates induced nonfinancial lenders to step in to provide needed financing. But last year, commercial banks' lending was cut more severely and the level of interest rates was even higher than in 1966.



**Year of stress and strain marked by peak levels of interest rates**



In 1968, as in 1967, commercial banks had been the major source of net funds supplied to the credit markets. But in 1969, their net lending slumped to \$12 billion, only a fraction of the previous year's level. Total deposits declined for the first time in a decade, with most of the decline centered in time deposits, whose rates had become increasingly less competitive in the face of rising yields on other securities. Savings-and-loan associations also supplied less funds than in 1968, but their performance was still stronger than that of the banks.

Nonbank financial institutions—life insurance companies, private pension funds, and state-and-local government retirement funds—helped alleviate the situation by supplying \$32 billion in funds, close to their previous year's performance. These institutions, being largely protected by the contractual nature

of their funds, posted a \$20-billion gain in resources during the year, slightly above their 1968 inflow. But their gain failed to offset the great decline in commercial-bank lending ability, and borrowers were forced to turn, as they did in 1966, to direct issues in the markets.

**Atypical lenders**

Since borrowers in this situation were willing to pay high prices for funds, lenders who ordinarily would have placed their surplus funds in the market through financial intermediaries were persuaded to operate directly in the market. The biggest jump occurred in the household sector, where the amount of funds directly supplied reached \$19 billion; this was far above 1968's normal figure of \$4 billion and even above 1966's previous-record figure of \$12 billion.

Individuals became major buyers of securities ordinarily of interest only to specialized buyers—Treasury bills, for instance. (In the third quarter, the household sector purchased Treasury securities at a \$39-billion annual rate.) But while households replaced the usual private financial buyers in the market for Treasury securities, they failed to increase their bank and other savings deposits, reflecting their sensitivity to the low ceiling rates payable on such deposits. Moreover, they sharply reduced their corporate-stock holdings, while posting fairly normal increases in purchases of corporate bonds and investment-company stock. Overall, then, the household sector allocated its usual purchases of financial assets to new uses, reflecting the change in relative yields available on those assets.

The business sector responded in the same fashion as households. First of all, corporations economized on liquid assets; in fact, they kept their liquid assets unchanged while increasing liabilities by \$50 billion. At the same time, corporations made major shifts



in their financial-asset holdings, becoming major direct suppliers of funds at the same time that they were creating heavy demands for funds. The business sector supplied \$11 billion (\$10 billion by corporations) directly to credit markets, and thus made a greater contribution than the commercial-banking sector to the markets.

At the same time, corporations sharply reduced their holdings of time deposits, because of the decreasing attractiveness of the yield on large certificates of deposits issued by banks. Corporate time deposits fell by over \$8 billion, cutting sharply the lending ability of commercial banks. In the last half of the year, corporations also began to dispose of their U.S. government securities. On the other hand, corporations increased their holdings of commercial paper — up \$8 billion in 1969 as against \$5 billion in 1968— and made net purchases of \$2 billion in state-and-local government securities.

### Atypical year

Heavy corporate demand for funds in 1969 resulted in record interest rates in an environment of increasing monetary restraint. As capital expenditures rose to record levels, corporate treasurers showed their willingness to pay the necessary price to obtain financing. High interest rates generated the needed

funds, but only by attracting the primary sources of national saving, households and business, to provide savings directly through the purchase of credit-market instruments. But financial institutions, who ordinarily function as the principal channel of savings to the ultimate investor, were hemmed in by interest rate ceilings and thus found themselves unable to compete effectively for funds.

The corporate demand was satisfied as some potential borrowers, principally state-and-local governments, were rationed out of the market. At the same time, the Federal government cut its demand for funds in line with its fiscal-policy shift, although its agencies increased their intermediary role. Commercial banks meanwhile had their lending ability reduced by heavy monetary-policy pressure on reserves—and reduced further by interest ceilings which reduced their ability to hold onto certain funds in their possession, and sharply increased the difficulty of their bidding successfully for new funds.

All in all, 1969 strongly resembled 1966, with its sharp increase in direct issue of debt and its heavy restrictions on commercial banks and similar institutions. In 1969, however, the pressures on the institutions were more severe and the interest-rate levels were even higher than they were in that earlier tight-money period.

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This annual-review issue was edited by William Burke and Karen Rusk. Principal contributors to this issue included: William Burke (U. S. business); Herbert Runyon (fiscal-monetary policy); Richard Gorin (balance of payments); Robert Johnston (credit markets); Verle Johnston (U. S. banking); Adelle Foley, Verle Johnston, Yvonne Levy, Donald Snodgrass, and Joan Walsh (District business); Ruth Wilson, Molly Anderson and Barbara Burgess (District banking); Paul Ma and Yvonne Levy (District highlights); and R. Mansfield (artwork). *Monthly Review* is published by the Bank's Research Department: J. Howard Craven, Senior Vice President; Gault W. Lynn, Director of Research.

## Disintermediating Year

Last year was one which the nation's bankers—and their customers—are not likely to forget in a hurry. On the heels of 1968's record \$39-billion gain, total bank credit outstanding (flow-of-funds basis) increased in 1969 by only about \$10 billion. At the same time, the banks' principal source of funds—their deposits—declined by over \$4 billion, for the first such decline in over 20 years.

Consequently, the banks had to work hard to find the funds to meet even that \$10-billion increase in credit. They did this by expanding their net borrowed reserves, by selling large amounts of loans out of portfolio (mostly to affiliates), and by borrowing a substantial volume of Eurodollars from their own foreign branches.

### Radical shift

The most dramatic chapter in 1969's banking story involved a radical shift in the banks' own sources of funds. First and foremost, this shift was evident in a record \$11-billion decline in commercial-bank time-and-savings deposits, a decline which contrasted sharply with at least modest net gains in such deposits at other depository-type institutions.

Most of this decline was attributable to a heavy (\$13 billion) attrition in relatively high-yielding, large denomination CD's, as businesses drew upon these funds to help finance their rising expenditures or to take advantage of the even higher yields available on market instruments. For similar reasons, public treasurers effected a \$2-billion reduction in their holdings of CD's, and consumers

reduced their holdings of low-yielding (4-percent) passbook accounts by about \$3 billion while increasing slightly their holdings of somewhat higher-yielding certificate accounts.

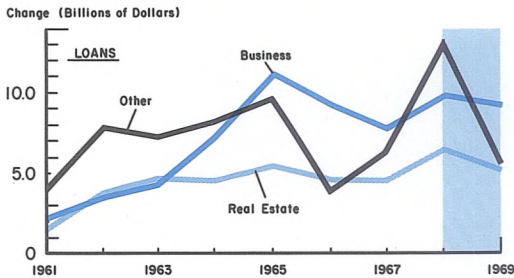


The banks' loss of time-and-savings deposits was partly offset by a \$7-billion increase in demand deposits: households, businesses, and public treasurers alike built up their working balances to finance larger current expenditures. Still, the banks' \$4-billion net decline in deposits required alternate sources of funds with which to finance the continued expansion of bank credit, and it was the tapping of these other sources of funds which provided an added dimension to 1969's banking drama.

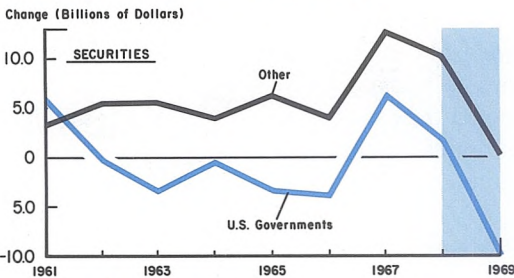
About \$6 billion was acquired through borrowing Eurodollars from abroad — a process which became increasingly expensive, however, as the year progressed and as Euro-dollar rates topped 10 percent. An additional \$4 billion was raised through the sale of commercial paper by bank-affiliated holding companies, with the funds being used to buy loans out of banks' portfolios.



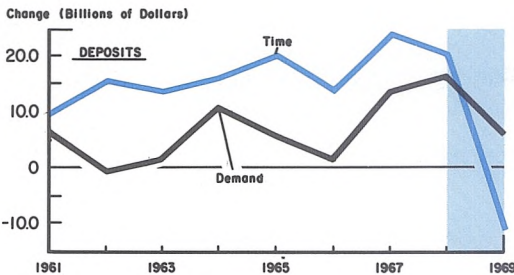
### Business-loan strength dominates 1969 banking year



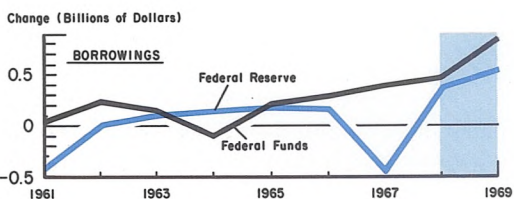
### ... as banks cut back sharply on security holdings



### ... and suffer severe reduction in deposit inflows



### ... while borrowing more from other banks and the Fed



The banks, of course, also utilized more traditional supplemental financing, by doubling their borrowings from the Federal Reserve Banks and in some cases by sharply expanding their borrowings of reserves from other banks in the Federal-funds market. However, the Fed-funds market provided net funds only as banks worked their existing reserves harder and more efficiently.

### Strong growth

In the face of a greatly restricted supply of loanable funds, relieved only in a limited fashion by the techniques noted above, the banks nonetheless found themselves faced with a continuing strong demand for credit throughout the year. This demand arose from all sectors, but predominantly from business.

Consumer loans rose by about \$3 billion—less than the \$5 billion gain of the previous year, but still greater than the average annual increase of the decade as a whole. This gain, moreover, represented about 37 percent of the total consumer credit extended by all lenders during the year—but this represented a significant decline from the banks' share of the year before.

The banks' total real-estate loans also rose by about \$5 billion; again, this was a smaller increase than during the previous year, but it still exceeded the average annual gain of the preceding decade. Even after allowing for a substantial increase in secondary-market purchases of mortgages by government agencies, the commercial banks' share of credit provided to the nation's strained mortgage markets declined only slightly in 1969, to 18 percent. This achievement was made even more notable in view of the banks' heavy attrition of time-and-savings deposits, the funds traditionally committed to the financing of mortgages.

But in 1969, as in 1968, the credit spotlight centered upon the heavy credit demands of the nation's non-financial business com-

munity—demands related in part to the financing of inventories, in part to the need for working capital generally, and in part to the financing of new plant and equipment. Furthermore, business credit demands remained strong even in the face of a steady and sharp rise in borrowing costs. The banks' prime lending rate jumped from 6¼ percent to 8½ percent between December and June, while the proportion of loans made at a rate of less than 8½ percent dropped from 98 percent to only 4 percent over the course of the year.

In 1969 as a whole, bank portfolios of business loans rose by about \$9 billion (or 9 percent), only slightly less than the previous year's record gain. Moreover, 18 of 20 major domestic industries increased their borrowings during the year. Even so, the banks' sharply increased costs and reduced

availability of funds helped divert a substantial volume of business financing to the bond and equity markets. As a result, the banks' share of all funds raised by the business community declined from 27 percent to 20 percent, substantially below the 30- to 40-percent share they garnered in several other recent years.

On balance, total bank loans during the year increased by about \$20 billion (or 9 percent), double the gain in total credit extended by commercial banks. That increase in loans had to be financed in part by a reduction of almost \$11 billion in security portfolios, all of it centered in holdings of U.S. Governments. On the other hand, a small (\$1 billion) increase occurred in holdings of municipal obligations, as banks continued their customary role as a net supplier of funds to the state-and-local government sector.

## Reprints Available

**A Time for Sharing . . . Crisis in the State House** (24 pp. 1969)—Two articles on problems of state-and-local government finance.

**Credit—and Credit Cards** (16 pp. 1969) — Report on recent developments in bank credit cards and check credit plans throughout the nation.

**Silver: End of an Era** (32 pp. 1969)—Report on silver coinage, industrial developments, and silver mining in the West.

**Copper: Red Metal in Flux** (60 pp. 1969)—Historical study of copper mining, copper markets, and the outlook for the future.

**Law of the River** (16 pp. 1968)—Report on present and future sources of water supply for the Pacific Southwest to meet its 21st-century needs.

**The Redwoods** (12 pp. 1969)—Study of the economic issues involved in the Redwood National Park along California's northern coast.

**Wages and Prices . . . Men of Steel** (20 pp. 1968)—Two labor-market articles.

**Centennial Summer** (12 pp. 1967)—Report on Alaskan industrial and resource development as providing vast potential for the growth of this area.



## Slowdown Revisited

The Western economy continued to expand in 1969, but its rate of real growth slowed significantly, at least partly because of conditions in the increasingly depressed aerospace-manufacturing industry. Many sectors of the regional economy surged ahead as before, but the general atmosphere was more reminiscent of the sluggish years of the mid-decade than of the Vietnam-induced boom of the later '60s.

Personal income in the West, as in the nation, increased about 9 percent over the year, although the bulk of this was offset by price increases. Wage-and-salary increases in the service industries, trade, and government were higher in the West than elsewhere, but the reverse was true in such key sectors as manufacturing and agriculture.

Retail sales in the West kept pace with the 4-percent nationwide advance, with non-durables slightly better and durables slightly worse in the region than elsewhere. In this region, sales at food outlets and gasoline service stations increased significantly — about 10 percent — while the automotive group barely kept up with the year-earlier pace.

At the same time, consumers found no relief from inflation. Prices in most Western cities rose about five percent in 1969 — except in San Francisco, which exceeded the national rate of 5.4 percent. Most of the strain on budgets came from increases in grocery, apparel, medical-care, and homeowner costs. In 1969 a moderate standard of living for a family of four cost well over \$10,000 in major Western urban centers, according to

sample budgets compiled by the Bureau of Labor Statistics.

Nonfarm employment in the Twelfth District states increased about 3½ percent over the year, nearly matching the gain recorded elsewhere. This increase, however, fell considerably short of the region's 4-percent gain of the preceding year. In the manufacturing (excluding defense), distribution, service, and government sectors, the West outpaced the nation in year-to-year employment gains. Substantial declines in aerospace employment, however, caused the defense category to drop 5 percent in the West and 1 percent elsewhere over the year.

Reflecting the incipient signs of slowdown, the regional unemployment rate failed to improve by any significant amount over the 1968 figure. At about 4.5 percent, the West's jobless rate remained a full percentage point above the rate prevailing elsewhere.

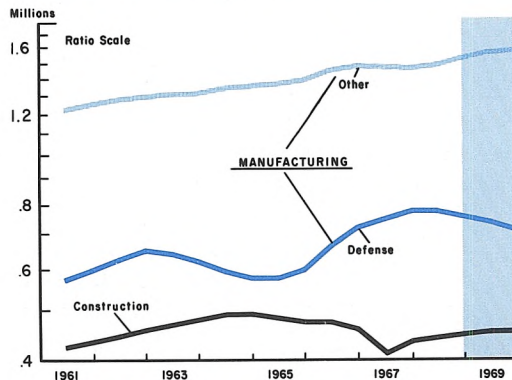
### Aerospace — grounded

District aerospace firms slumped under the impact of sluggish order inflows, which resulted in a second consecutive year of employment declines. The 1969 decline, which spelled 59,000 lost jobs, left the West's aerospace payrolls standing at 663,000. Most of the decline occurred in California, but the rate of decline was greater in Washington (17 percent) than in California (7 percent). The loss was a reflection of falling orders from the military and the space agency, as well as reduced manpower requirements for commercial-jet production. Nationally, aero-

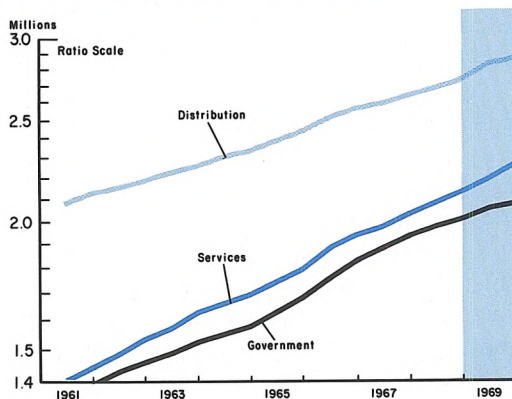
space employment eased after trending upward in 1968.

Prime defense-contract awards were down 18 percent from the late '68 level. But on a more hopeful note, research-and-development contracts were about the same as a year earlier, with the District's share rising from 38 to 42 percent of the national total. Space contracts in the District declined 25 percent between the first half of 1968 and the first half of 1969. A generation gap meanwhile developed in the commercial sector, as the production of current jet models declined and firms prepared instead for production of the super-size jets of the 1970's.

### Employment continues to fall in aerospace manufacturing



### ... but job pace remains strong in other Western industries



### Construction — sky high

Despite much publicized difficulties in housing — continuing rises in construction costs and fears of reduced mortgage financing — 1969 was a banner year for construction activity in the West. Total construction spending in the District hit a record \$11.3 billion in 1969 — 18 percent over the previous year and triple the national increase (F. W. Dodge contract data).

Homebuilding in the West, although off to a slow start, finished up with 319,000 starts for the year, a 9-percent gain over 1968 in contrast to a 4-percent national decline. Still, homebuilding activity was somewhat uneven in various areas; Oregon and Washington registered losses of 7 and 27 percent, respectively, but these were more than offset by gains of 25 percent or more in Los Angeles, Phoenix, and Las Vegas. More than half of all new units built were multiple units, reflecting the cost and financing considerations which dominated building decisions during the year.

Non-residential and heavy-engineering construction showed an even sharper rise in 1969. Overall, spending on such projects increased by about 25 percent over the year; for the non-residential field this was double the national gain, and for the heavy-engineering sector it was triple the U.S. increase.

### Lumber, steel — mixed

The Western lumber industry saw its hopes for a record '69 diminished by the national slowdown in housing activity, which helped send new orders (and prices) plummeting from the peak levels of early spring. A heavy early-year inflow of orders from homebuilders, coupled with seasonal production problems, pushed wholesale softwood-lumber prices up 18 percent in the first quarter of 1969, 41 percent above a year earlier. But spring and summer brought a housing slowdown, a run-off of inventories by wholesalers,



and a Presidential directive to reduce defense purchases. Orders and prices fluctuated in the fall months but then spiraled downward, so that softwood-lumber price quotes in December were 14 percent below the year-earlier level. The softwood-plywood index followed in step by plunging more than one-third below its 1968 mark.

Steel production in the West rose almost 2 percent to a record 7.1 million tons for the year, despite a growing volume of imports. Elsewhere in the nation, imports declined sharply as a result of exceptionally strong European demand, voluntary import quotas, and the absence of the strike threat which had led to a particularly heavy influx of foreign steel in 1968.

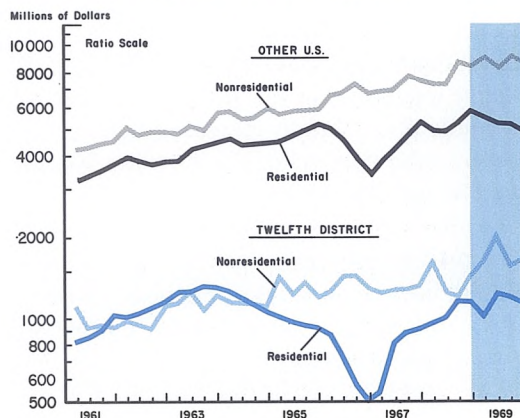
Domestic steel producers, operating against a background of strong worldwide demand, upped prices several times during the year: in April on hot-rolled carbon and alloy bars; in June on structural shapes, plates, and reinforcing bars; and in August on sheet, strip, and other flat-rolled products. These increases boosted the steel price index by 5 percent for the year.

### Agriculture — marking time

Cash receipts to District farmers exceeded \$7 billion in 1969—a new record—with livestock and livestock products topping last year's levels and crop returns holding even. Despite the increase in gross returns, the income picture for District farmers (particularly in California) was somewhat darkened by rising production costs, but preliminary estimates suggest that net income per farm may also have risen.

Total crop output, while not matching 1968's record levels, was still well above previous years. Throughout the District, production of fruits and nuts increased, with deciduous fruits in the Pacific Northwest recovering from their 1968 declines. Arizona's record citrus crop contributed to the District's strong gain in that category.

## Construction activity rises faster in West than in rest of nation



Declines in field crops and fresh and processing vegetables contributed to California's 6-percent decline in crop volume. Cotton growers in California and Arizona, moreover, were plagued by bad weather and pesky insects.

In the livestock sector, beef production increased as producers attempted to take advantage of the highest beef prices since Korean War days. Even so, increased costs of feed and feeder cattle offset some of the cattle producers' increases in net income. Returns also rose in other sectors, as pork, poultry, and egg prices increased during the year.

### Extractive industries — strong

Metal prices forged ever upward as producers struggled to keep up with strong worldwide demand. Copper mine production surpassed 1966's record high, while the producer price of copper rose from 42 to 52 cents, reflecting the rise in world demand and the shortage in supply created by production problems overseas. Then, in early 1970, the price reached 56 cents a pound—almost half again as high as the figure quoted prior to the 1967-68 mine strike. This latest price boost triggered a Government investigation into pricing policies and market conditions in the industry.

## FEDERAL RESERVE BANK OF SAN FRANCISCO

The price of silver trended downward during the year, in striking contrast to the situation in other metals markets. The price decline reflected the relative stability of international currencies, which reduced speculative interest in the metal, and also reflected the outlook for sharply increased supplies because of the removal of the Treasury ban on private melting of silver coins.

With the narrowing of the deficit between new production and industrial consumption, bidding slowed at the Government's weekly auctions, despite a reduction in Treasury offerings from 2.0 to 1.5 million ounces weekly. Silver prices consequently dropped from \$2.03 an ounce in January to \$1.56 an ounce in July—the lowest level since the Treasury abandoned the \$1.29 ceiling in July 1967. Even after a year-end recovery to \$1.80, silver prices were still well below July 1968's record high of \$2.56 an ounce.

Favorable market conditions in the aluminum industry pushed production and shipments to record highs, while keeping a close balance between supply and demand. One-cent price increases in January and October

brought the ingot quotation to 28 cents a pound, the highest level in many decades.

The highlight of the year for the petroleum industry was the \$900 million sale of oil leases on Alaska's North Slope. Little information is yet available about drilling in the area, but indicated reserves are sufficient to warrant construction of a billion-dollar pipeline to move oil south from the site.

The year's bad news came from the Santa Barbara Channel, where a massive offshore oil leak began early in 1969. Drilling was allowed to continue on the Federally leased property in an effort to ease the underground pressure, but seepage persisted and controversy increased concerning the continued drilling. Over one-fourth of the oil produced in California now comes from offshore leases.

Petroleum refining activity in the West meanwhile rose about 5 percent in 1969, partly on the basis of increased foreign crude-oil imports. (The dependence on foreign crude should ease, however, as supplies become available from Alaska's North Slope.) The increased domestic demand for petroleum products came largely from non-military markets, especially for gasoline and jet fuel.

### INDEXES OF INDUSTRIAL PRODUCTION — TWELFTH DISTRICT

(1957-59 = 100)

INDUSTRIAL PRODUCTION	1961	1962	1963	1964	1965	1966	1967	1968	1969
<b>Copper</b>	119	127	128	129	140	146	98	126	162
<b>Lead</b>	99	105	103	96	93	118	97	86	83
<b>Zinc</b>	97	101	98	93	89	96	87	76	75
<b>Silver</b>	105	105	103	102	115	129	101	101	122
<b>Gold</b>	92	86	86	85	116	135	104	98	128
<b>Steel Ingots</b>	111	100	117	132	138	140	136	142	145
<b>Aluminum</b>	97	107	118	135	150	165	195	204	268
<b>Crude Petroleum</b>	96	96	97	97	102	112	122	139	145
<b>Refined Petroleum</b>	108	111	112	115	120	122	128	138	141
<b>Natural Gas</b>	121	127	144	148	147	158	147	154	170
<b>Lumber</b>	95	98	98	108	107	103	97	106	104
<b>Douglas Fir Plywood</b>	131	140	155	167	174	167	156	168	159
<b>Canned Fruit</b>	116	121	108	141	109	135	103	132	138
<b>Canned Vegetables</b>	89	106	95	100	97	113	114	121	93
<b>Meat</b>	111	112	115	126	126	130	129	133	135
<b>Sugar</b>	107	113	120	138	137	132	116	136	144
<b>Creamery Butter</b>	120	119	103	103	96	85	105	115	116



## Challenging Year

Western banks had to deal with a number of new, tough challenges in the closing year of the decade. Faced with mounting reserve pressures and with problems of disintermediation, which caused a massive \$2.4-billion net outflow of deposits, banks showed surprising skill and inventiveness in finding alternative sources of funds to meet continuing heavy demands for credit. Yet, Twelfth District commercial banks as a whole posted only a \$204-million (0.4 percent) gain in total credit in 1969—and large District banks actually suffered a small decline in total credit, since their loan expansion was more than offset by a reduction in their securities holdings.

District commercial banks recorded a \$2.2-billion increase in loans, on a balance-sheet basis, and this represented a 5½-percent rate of expansion, in contrast to the 13-percent gain of the preceding year. Business borrowers accounted for a higher proportion of the banks' total loans than they did in 1968 but, even so, the business-loan increase was less than half the previous year's gain. Similarly, the rise in mortgage financing was held to little more than one-third of the 1968 gain, and the consumer instalment-credit gain was also smaller than in the year before.

These balance-sheet data, however, understate the total loan demand *initially* accommodated by District banks in 1969, since large amounts of loans were removed from banks' balance sheets and sold outright to bank holding companies, affiliates, and foreign branches. The actual increase in total loan accommodation thus was about 50 per-

cent greater than the stated increase, and the business and mortgage gains were over 80 percent greater than indicated by balance-sheet data.

### Search for funds

The deposit outflow in 1969 centered on time-and-savings deposits—demand deposits rose by about \$800 million. Spiralling money-market rates, mounting taxes and cost-of-living increases led to an accelerating rate of attrition in time deposits as the year progressed. Individual savings, as well as large corporate CD's, were involved in the heavy \$3.2-billion run-off. The banks' major problem thus was to find funds to meet these deposit withdrawals and to satisfy the sustained heavy loan demand.

First of all, District banks ran off or sold both U.S. Government and other securities, for a \$2.0-billion (12 percent) reduction in investments. But even this amount was insufficient to meet their needs, so they then sought additional funds from other sources. They sharply increased their borrowing at the Federal Reserve discount window, and they also made increased use of Federal funds to meet reserve deficiencies. In addition, they borrowed more heavily from corporations under repurchase agreements, and substantially increased their borrowings of Eurodollars — either from their own foreign branches or from foreign banks or dealers. Finally, in the latter half of the year, many banks turned to outright sales of loans from their portfolios, with the parent holding com-

pany selling commercial paper and using the proceeds to purchase loans from its banking subsidiary.

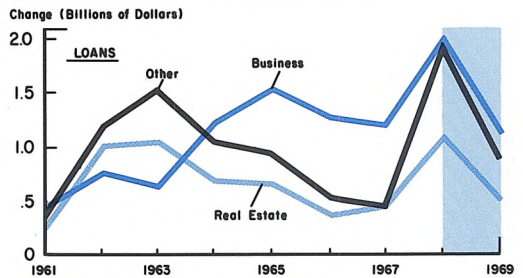
The events of 1969 led to a significant erosion in bank liquidity. As loans continued to expand in the face of the substantial deposit decline, the loan-deposit ratio at large District banks jumped to 79.6 percent at year-end from the 71.0-percent figure of the year before — well above even the 72.4-percent figure reached in the 1966 tight-money period. Even after adjustment to include Eurodollar deposits, the 1969 ratio was at an all-time high.

As further evidence of weakened liquidity positions, Western banks suffered a decline in their security-deposit ratio, from 5.6 percent to 3.4 percent over the year, as they reduced their holdings of short-term Treasury and municipal securities. Banks also placed greater reliance on borrowed funds to finance their asset expansion; for large District banks, in fact, the increase in borrowed funds exceeded their total increase in assets over the year.

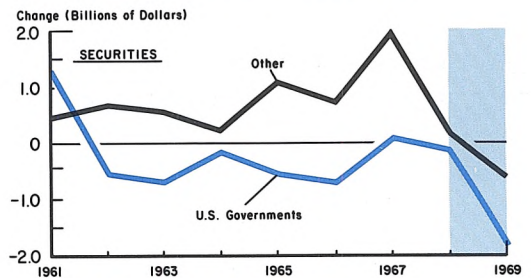
Yet, the 1969 environment did have some favorable aspects — especially in the profit column. Most Western banks followed the national pattern and increased (in three steps) the rate they charged prime loan customers to a record 8½ percent. On the basis of increases in the prime rate and in other loan rates, which are “tied” to the prime rate, the average return on bank loans rose sharply during the year. On the negative side, bank costs increased — particularly for borrowed funds, as strong demand pushed rates on Federal funds and Eurodollars to record highs.

Nevertheless, according to preliminary reports, the revenue gain far exceeded the increase in expenses, so that operating earnings rose well above the previous record set in 1968. Substantial offsets occurred in both years, however, since both years were “cap-

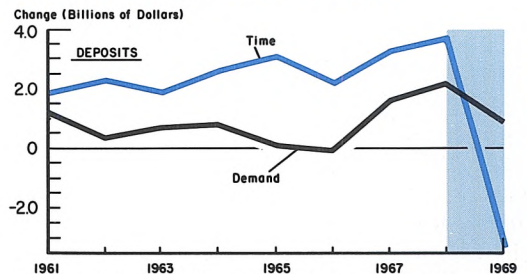
### Western banks continue to maintain strong loan pace



### ... but at the expense of heavy cutbacks in securities



### ... while deposits decline for first time in two decades



ital loss” years for many District banks. But despite 1969’s heavy losses—associated with large sales of securities on markets that had fallen as interest rates rose—the 1969 net-income figure was also well above the 1968 figure.

### Search for reserves

Despite the decline in deposits, required reserves of District member banks were \$245 million higher in 1969 than in 1968, on a daily-average basis. This paradox (higher



reserves in the face of declining deposits) was partly due to a shift in the composition of deposits — the decline in time deposits, which carry a relatively low reserve requirement, and the rise in demand deposits, which carry much higher requirements. In addition, required reserves rose because of the April increase in requirements against demand deposits and the October imposition of reserve requirements on certain Eurodollar holdings.

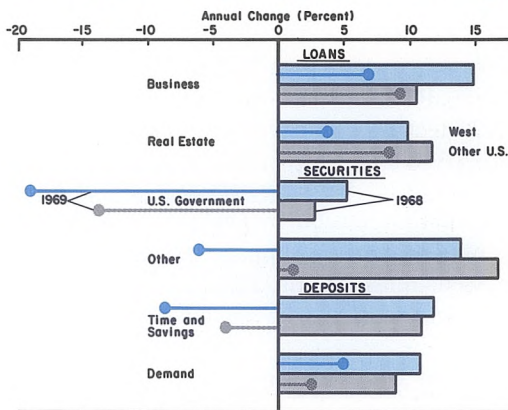
The daily average volume of borrowing at the Federal Reserve discount window reached \$123 million—nearly double the volume of discounting of the previous year. Excess reserves meanwhile declined, and net borrowed reserves (borrowed reserves less excess reserves) rose to \$73 million—more than twice the 1968 average.

District banks also relied more heavily on the Federal funds market as a source of funds to cover reserve deficiencies. (In 1968, by way of contrast, they relented to Government-securities dealers a high proportion of the Fed funds purchased from other banks.) In 1969, District banks were net interbank Fed-funds sellers (lenders) only during the first quarter of the year; during the rest of the year, they steadily increased their purchases (borrowings) and sharply reduced their Fed-funds sales to securities dealers. In the aggregate, then, District banks were average net purchasers of \$38 million during the year—a shift from average sales of \$136 million in 1968—and many District banks were much more substantial borrowers than this aggregate total indicates.

### Meeting the pressures

Nonetheless, District banks were able to meet the strong pressures on their resources only by turning to somewhat unconventional sources of funds. Despite their increased borrowings from the Federal Reserve and increased Fed-funds purchases from other

## Western banks' balance sheets show tight-money impact most strongly



banks, these traditional sources of funds accounted for only a small part of their total inflow of funds in 1969.

During the first quarter, large District banks obtained more than one-half of their increased funds from sales of Governments and other securities, and obtained other significant amounts from Eurodollar borrowings and increased time-deposit inflows. They used most of these added funds to expand their loan portfolios and to make Fed-funds sales to banks and dealers.

In the second quarter, banks continued to sell off securities, although to a smaller extent than before, and obtained added funds from purchases of Fed funds, as well as from increases in demand deposits and Eurodollar borrowings. They used most of these new funds to expand loans, but diverted about 15 percent of the total into meeting time-deposit withdrawals.

By the third quarter, large District banks used almost the entire increase in their funds to meet payouts of time deposits. (They recorded only a small increase in loans on their balance sheets, largely because of outright sales from their portfolios.) Eurodollar borrowings increased as a source of funds, along with continued sales of securities.

Finally, the situation intensified in the

fourth quarter. Virtually the entire increase in funds in that period went to meet time-deposit withdrawals—indeed, loans showed a net decline, and thus became a source rather than a use of bank resources. For other funds, banks relied upon the seasonal increase in demand deposits (over one-third of the total), and sales from securities (one-fourth of the quarterly increase). Altogether, the total expansion in District banks' funds showed a marked slippage as the year progressed, reflecting the mounting pressure on bank resources.

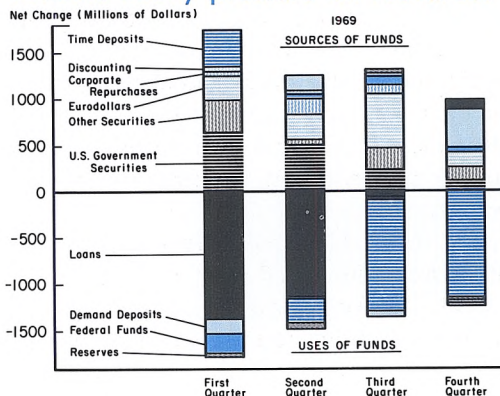
### Fulcrum of pressure

Total deposits at District member banks declined by \$2.4 billion in 1969—in sharp contrast to the \$5.7-billion *increase* of the preceding year. (This was the first time since 1948 that Western banks had recorded a year-to-year decline in deposits.) The private demand-deposit component, after a decline in the first five months, posted increases in the latter half of the year. But time-and-savings deposits declined by \$3.2 billion, wiping out almost all of the preceding year's gain.

Large District banks last year suffered a \$545-million decline in consumer-type deposits—passbook savings and small certificates of deposit. They posted a net gain in the first quarter, although a substantial amount of funds shifted out of regular 4-percent passbook accounts into the widely-advertised 5-percent open accounts. Large tax payments halted the growth in consumer savings in the second quarter, and heavy net outflows then occurred in the last two quarters as higher rates of return on other forms of investment attracted individual savings funds. November's Christmas Club pay-outs, and the year-long rise in living costs, which forced some individuals to dip into their savings, added to attrition.

Meanwhile, massive withdrawals of large

## Slowdown in banks' funds reflects heavy pressure on resources



negotiable CD's occurred as money market rates rose—and remained—above the 6¼-percent ceiling rate on CD's. Even so, the 40-percent (\$1.6 billion) rate of attrition in this category was less than that experienced by large banks nationally. The run-off accelerated through the third quarter, and then tapered off in the last few months of the year. In this period, domestic corporations continued to reduce their CD's, but foreign governments and institutions increased their deposits, which are not subject to rate ceilings.

Large District banks also experienced a \$1.2-billion reduction in public time deposits, which more than cancelled out the abnormally large increase of the preceding year. This large outflow was in part a technical readjustment, but it also reflected the placement of public funds in other forms of investment bearing higher rates of interest—as well as a failure of public authorities to obtain funds from bond issues. (Many issues could not be floated simply because ceilings on rates which public authorities were legally permitted to pay on flotations were well below general money-market rates.)

### Meeting business demands

District banks had difficulty in meeting the heavy business demand for funds in 1969. Moreover, most of the \$1-billion increase for



the year was confined to the first two quarters, on a seasonally adjusted basis. Beginning about mid-year, District banks stepped up their outright sales of business loans, mainly to their own bank holding companies. But even after adjustment of the data to include these sales, business loans actually showed a decrease in the final quarter of the year.

All major business borrowers, except mining firms, increased their bank-held debt in 1969. The largest gain was posted by durable-goods manufacturers, with particularly heavy borrowing from the transportation-equipment sector. In the public-utilities category, transportation accounted for the largest increase in financing. Construction loans rose only nominally, and foreign business loans and bankers acceptances declined.

Because of the shortage of loanable funds, District banks pursued an increasingly restrictive lending policy in 1969. The average interest rate charged by large-city banks on

regular short-term loans reached 8.81 percent in November—up from 6.62 percent a year earlier. Rates on loans made under formal revolving-credit agreements also rose to 8.64 percent—up from 6.50 percent. Besides charging higher loan rates, Western banks were stricter in enforcing compensating-balance requirements and were less willing to make loans for speculative or non-productive purposes. New customers and non-local customers found it much more difficult to get credit accommodation.

### Meeting other demands

Large District banks posted an 8-percent (\$426 million) gain in consumer instalment loans, in contrast to the 14-percent year-earlier gain. (The discrepancy was smaller, however, after adjustment for a substantial amount of loans sold out of portfolio.) This reduced rate of expansion largely reflected the cutback in auto purchases by Western

### SELECTED ASSET AND LIABILITY ITEMS OF WEEKLY REPORTING LARGE BANKS

(dollar amounts in millions)

	TWELFTH DISTRICT				OTHER U.S.
	Outstandings Dec. 31, 1969	Net Change			Net Change
		Dec. 31, 1968 to Dec. 31, 1969		Dec. 27, 1967 to Dec. 31, 1968	Dec. 31, 1968 to Dec. 31, 1969
		Dollars	Percent	Percent	Percent
Loans gross adjusted and investments	\$49,814	- 259	- .52	+ 12.95	+ 1.60
Loans gross adjusted	37,752	+ 1,785	+ 4.96	+ 14.42	+ 7.20
Commercial and industrial loans	14,552	+ 844	+ 6.16	+ 18.50	+ 11.09
Real estate loans	11,043	+ 492	+ 4.66	+ 9.57	+ 5.08
Agricultural loans	1,318	+ 71	+ 5.69	+ 2.97	+ 5.62
Loans to nonbank financial institutions	1,867	+ 201	+ 1.21	+ 2.08	+ 10.82
Loans for purchasing or carrying securities:					
To brokers and dealers	439	- 342	- 77.90	+ 72.57	- 18.10
To others	325	+ 64	+ 19.69	+ 39.27	- 6.19
Loans to foreign banks	268	+ 9	+ 3.36	- .39	- 8.32
Consumer instalment loans	5,580	+ 426	+ 8.27	+ 14.16	+ 10.55
All other loans	2,360	+ 20	+ .85	+ 2.16	- .79
Total Investments	12,062	- 2,044	- 14.49	+ 9.38	- 11.85
U.S. Government securities	4,566	- 1,397	- 23.43	+ 5.76	- 18.10
Obligations of states and political subdivisions	6,505	- 537	- 7.63	+ 13.91	- 7.27
Other securities	991	- 110	- 9.99	+ 2.50	- 4.58
Total deposits (less cash items)	47,057	- 2,385	- 4.82	+ 16.34	- 5.50
Demand deposits adjusted	17,552	+ 536	+ 3.15	+ 12.78	+ 1.98
Time and savings deposits	27,715	- 3,002	- 9.77	+ 12.03	- 14.99
Savings deposits	14,851	- 1,055	- 6.63	+ 1.56	- 4.12
Other time IPC	9,074	- 673	- 6.90	+ 25.63	- 22.16
Deposits of states and political subdivisions	2,632	- 1,212	- 31.53	+ 36.75	- 49.98
(Neg. CD's \$100,000 and over)	2,357	- 1,519	- 39.19	+ 33.43	- 54.69
Capital accounts	4,020	+ 205	+ 5.37	+ 4.67	+ 6.02
Total assets, liabilities, and capital accounts	63,211	+ 1,245	+ 2.01	+ 10.49	+ 3.34

consumers. Financing of other consumer goods increased faster than in 1968. Personal-loan financing meanwhile fell below the 1968 increase. Credit extended under credit-card and related plans (which are included in the consumer-credit data) continued to expand, just as in past years.

Western banks slowed down their pace of mortgage financing in 1969, largely as a consequence of their heavy outflow of time deposits. On a balance-sheet basis, large District banks showed a 1969 increase of 4.7 percent (\$492 million) in real-estate loans, compared to a 9.6-percent expansion in 1968. These figures, of course, understate the volume of mortgage-loan extensions, since Western banks sold a large volume of mortgage loans to their bank holding companies and to others during the year.

Savings-and-loan associations, the other foundation of the Western mortgage industry, were also forced to moderate their lending pace in the face of a net deposit outflow. (Altogether, they posted a net savings loss of \$127 million, due to heavy losses in California and Nevada, which offset modest gains in other District states.) Nevertheless, by substantially increasing their borrowings from the Home Loan Banks and by reducing their holdings of cash and Government securities in line with a reduction in legal liquidity requirements, District S&L's achieved a quite respectable gain in their mortgage portfolios—just over \$2 billion, actually a shade more than their strong 1968 gain.

In the mortgage sector as in other lending

sectors, the growing stringency of loanable funds became increasingly evident as the year progressed. As one evidence, S&L commitments to make future loans declined by more than a third (to \$404 million) over the course of the year. As further evidence, mortgage lending rates rose to new peaks during the year; for example, rates on conventional new-home loans exceeded 9 percent as the year came to a close, well above the national average.

### Rough road ahead?

Western banks successfully weathered the difficulties of 1969, but they entered 1970 in a much more vulnerable position. For one thing, their security holdings are substantially below the level of a year earlier. About one half of the 1969 decrease occurred in short-term maturities, and their flexibility is further limited by collateral requirements.

In the first month of 1970, moreover, Western banks experienced further losses in savings deposits, and corporate CD's also continued to lag as recent changes in Regulation Q left ceiling rates still below general money-market rates. In addition, banks faced the prospect of a new reserve requirement against, as well as rate ceilings on, the use of funds obtained through commercial paper sold by their subsidiaries or bank holding companies. Thus, as the new year began, District banks were hard-pressed to find the funds to meet all the new demands upon their resources.



## Checklist of '69

Despite the slowdown in some segments of the regional economy, industries in all Twelfth District states produced a number of highly tangible achievements last year. The following is a summary of their accomplishments in 1969 and their plans for 1970.

### California

**Aerospace** Although the aerospace industry felt the impact of reductions in Federal spending, it received a number of large orders for both aircraft and missiles. By year-end, a \$471-million order had been placed for the Navy's S-3A, a carrier-based anti-submarine aircraft, and a \$155-million order for Polaris and Poseidon missiles. Three contractors are vying for construction contracts for the new B1 strategic bomber (formerly known as the Advanced Manned Strategic Aircraft), with research expected to cost \$100 million and the final program amounting to a hundred times that sum.

Activity increased in the commercial sector with two producers showing a backlog of 380 orders for "airbuses," valued at more than \$6 billion. To handle these orders a total of \$105 million is being spent by two firms on building new plants in Palmdale and Long Beach and on expanding and improving existing facilities.

**Metals** A \$6-million expansion program at a Fontana plant will increase its steel ingot-making capacity by 500,000 tons to 3.4 million tons per year. A new \$25-million aluminum technology center at Pleasanton is ready for occupancy; a staff of 400 scientists and engineers will use the center to conduct research programs in aluminum, nickel, and specialty metals.

Two new aluminum fabricating plants opened in California. A Sacramento electrical cable plant, built by a Canadian firm, houses drawing machines capable of finishing aluminum wire at 8,000 feet per minute; it has a capacity of 40,000 tons per year of  $\frac{3}{8}$ -inch redraw rod. In addition, an aluminum extrusion and anodizing plant is now in operation at Pomona.

**Petroleum** Oil production exceeded a million barrels a day, thanks to new wells in production in the Wilmington field, offshore leases in the Santa Barbara Channel, and thermal recovery in Kern County. However, massive leakage in the Santa Barbara Channel caused a slowdown in drilling there.

New oil fields were discovered at several locations, including Castle Rock Springs in Lake County. A new gas pool near Grimes in Colusa County promised average production of 1.2 billion cubic feet a day.

A \$100-million oil-refinery expansion at El Segundo was completed during the year. Construction began on a \$50-million refinery at Wilmington, complete with flashing unit, coking unit, boiler house, water-treatment facility and storage, and production-handling equipment. Plans for the future include a \$13-million expenditure for a 30,000-barrel-per-day crude-oil processing plant at Wilmington, and a \$10-million refinery in Beaumont, Riverside County.

**Forest Products** Particleboard was the fastest growing segment of the market. A \$6-million particleboard plant, with an annual capacity of 80-million square feet, will be built by 1971 in Mendocino County. Also, a \$3-million plant will be built at Dinuba in Tulare County.

**Construction** One highlight of 1969 was San Diego's 200th anniversary; the completion of several large new buildings and shopping centers contributed to the celebration. A hotel construction and expansion boom meanwhile continued in San Francisco.

On the drawing boards or under construction in '69 were numerous projects, including: the \$350-million Otay Ranch Community in San Diego; the \$300-million Warner Ranch Urban Center in Woodland Hills; the \$200-million Yerba Buena Center in San Francisco; the \$110-million Ferry Port Plaza in San Francisco; the \$100-million complex on a man-made peninsula at Emeryville; the \$100-million recreation and camping development at McClure Lake near Yosemite National Park; a \$100-million commercial land development at El Segundo; a \$93-million downtown regional shopping center in Oakland; and an \$85-million waterfront complex in San Francisco.

**Public Utilities** Record spending of \$340 million by a major Northern California utility will add about 2 million kilowatts to the system capacity between 1969 and 1973. Included in the project are: a 1,660,000-kilowatt atomic power plant near Diablo Canyon in San Luis Obispo County; a 750,000-kw power plant at Pittsburg in Contra Costa County; a 117,000-kw addition to the Belden hydroelectric project on the Feather River in Butte County; and a 55,000-kw addition to the Geysers power plant in Sonoma County. Another Northern California utility started building the \$180-million, 847-megawatt Rancho Seco nuclear power plant, scheduled for completion by 1973.

A major utility in Southern California set aside \$341 million for constructing power facilities, as part of a total investment of \$1.4 billion designed to produce more than 3.5 million kilowatts of new generating capacity by 1972. The same company also planned a \$300-million, 1.5-million-kw coal-fired

steam electric-generating plant in the Victorville area of the Mojave Desert, and a \$179-million addition of two 750,000-kw electric-generating units in Huntington Beach. Another utility meanwhile announced several construction projects totaling \$185 million, including the 1,250,000-kw Castaic power project in Southern California.

**Transportation** As work continued on the state's 2,165-mile share of the national interstate highway system, some \$500 million worth of bids were called for during the first half of the year. San Francisco International Airport began work on a \$160-million project designed to prepare for the arrival of the new jumbo jets and supersonic transports. In the ocean-transport field, one shipping concern completed a \$40-million expansion program, increasing its fleet by four ships and its shipping capacity by 2,350 containers.

## Pacific Northwest

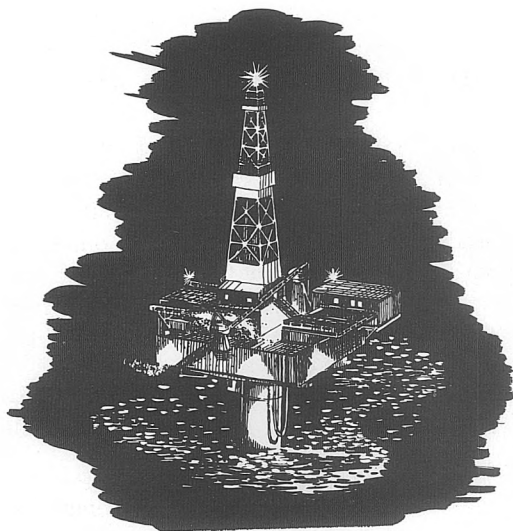
**Aluminum** Two new 40,000-ton potlines came on stream last year at Tacoma and Longview. These projects, along with several earlier ones—especially a new reduction plant at Ferndale, Washington—added 572,000 tons of new capacity in the 1965-69 period, or more than half of the nation's total new capacity.

Projects in the planning stage include a 100,000-ton smelter near Goldendale, Washington; a 135,000-ton plant at Astoria, Oregon; and potline additions to existing plants at Longview, Washington, and Troutdale, Oregon. These projects will raise annual production capacity in the region from 1.4 million tons in 1969 to 1.7 million tons by 1972.

**Steel** A \$35-million fully integrated steel complex at the Port of Portland's Rivergate industrial park, as well as a steel rolling mill at McMinnville, Oregon, came into production in 1969. The Portland facility is the first in the Pacific Northwest to process iron ore



directly into steel, and it includes a rolling mill for producing the type of large-size steel plates in demand by shipyards and other heavy steel fabricators. Raw steel production will reach 150,000 to 200,000 tons in 1970.



**Forest Products** Despite the slowdown in the 1969 market, forest-product companies planned several expansion projects. The most extensive is a \$24-million complex at Klamath Falls, Oregon, which will employ 300 workers when it is completed in the early '70s. It will include a new plywood mill capable of producing 90-million square feet annually, along with a particleboard plant with a capacity of 56-million square feet.

Other Oregon plans include: an \$8-million project which will triple capacity at a Springfield particleboard plant; a \$14-million paper-mill expansion in Albany; a \$5-million particleboard plant enlargement at La

Grande; and a new particleboard plant at Coos Bay. Meanwhile, a plant for prefabricating homes came into production at Hoquiam, Washington, and another such plant was enlarged at Chehalis.

**Aerospace** The aerospace industry in the Pacific Northwest faced a year of retrenchment in 1969. Cutbacks and delays in Federal defense and space projects and in the SST program severely affected the industry. Employment fell from a 1968 peak of 105,700 to 84,000.

Defense contracts amounted to \$60 million, chiefly for Minuteman missiles. NASA spent \$19 million for the construction of four Lunar-Rover vehicles to be used in 1971-72. Unfilled government orders at the end of September amounted to \$294 million for military aircraft and \$264 million for the missile and space programs.

Commercial-aircraft production declined sharply from 1968 levels, but backlogs last fall totalled \$4.7 billion. Production delays occurred on the 747 transport, but the first of these jumbo jets then went into scheduled service in January 1970.

**Petroleum and Chemicals** A major oil firm began construction of a \$100-million refinery near Bellingham, Washington; it will be the largest refinery in the Pacific Northwest, with a capacity of 100,000 barrels a day. Another firm started a refinery with 10,000 b/d capacity at St. Helens, Oregon, on the Columbia River. Alaskan oil, combined with the growth of Pacific Northwest industrial sites and markets, is expected to bring a long-term boom in refinery construction to this area.

A \$20-million magnesium plant is scheduled for completion in 1971 near Dallesport, Washington, to produce 48,000 tons of magnesium and 100,000 tons of chlorine annually for sale to the aluminum, pulp and paper, and food-processing industries. Also, a \$3-million magnesium plant with a 100,000-ton

annual capacity is included in an \$8-million expansion program under way at a titanium facility at Albany, Oregon.

**Construction** Both residential and commercial construction eased off in the Pacific Northwest as a result of the slowdown in general business activity in the area. The largest project now being constructed is the \$175-million, 650-acre Oregon residential development between Portland and Lake Oswego, including the Mount Sylvania Recreation Center.

Hotel and recreational construction continued to boom throughout the year, however. In Washington some \$100 million is being spent on the construction or expansion of hotels, motels, and stadiums to handle increased travel and convention business. Extensive projects include: a \$40-million, 50,000-spectator stadium in Seattle; a \$30-million, 40-story office tower in Portland; the \$30-million Progress Center shopping complex near Tigard, Oregon; a \$25-million recreation complex near Oregon City; and a \$20-million convention center in Tacoma.

In Washington, a utility firm began construction of a \$50-million, 1.4-million-kw steam electric-power plant at Centralia. Another firm will build a \$200-million, 1,000-megawatt nuclear-generating plant on Kiket Island in Skagit County.

**Transportation** Construction progressed on a \$68-million, 2,159-foot double-deck bridge and freeway spanning the Willamette River in Portland. Both Seattle-Tacoma and Portland International airports were involved in major expansions; a \$100-million investment for each airport is expected to meet growth needs to the year 2000.

## Mountain States

**Copper** Two new copper facilities began operating in Arizona: a mine and concentrator capable of processing 30,000 tons of ore per day in the Twin Buttes district; and a

\$35-million plant to treat silicate copper ore at Ray. In addition, plans were announced for a \$100-million development at the Metcalf copper mine near Morenci, Arizona; the mine is expected to reach an initial capacity of 50,000 tons of copper by about 1973.

A 500-million-ton copper ore body will be developed at the Lakeshore property on the Papago Indian Reservation south of Casa Grande, Arizona. An underground mine and sulfide-flotation concentrator with a capacity of 8,000 tons/day are planned at cost of \$100 million. A 4,000 tons/day leaching plant to treat oxide ores is scheduled for the San Xavier mine.

Another project to increase Arizona's copper-refining capacity is a 200,000-ton, \$34-million plant near the San Manuel smelter—whose capacity, incidentally, is now being expanded from 110,000 to 185,000 tons per year. The new plant will produce cathodes and continuous cast rod through an advanced casting method which by-passes the traditional production of wirebar.

**Magnesium** Several projects will help extract minerals from Utah's Great Salt Lake: A \$70-million plant capable of recovering 45,000 tons of magnesium, 81,000 tons of liquid chloride, and 48,000 tons of gypsum annually; a \$26-million brine-processing plant for producing magnesium chloride; and a \$22-million facility for extracting potash, sodium sulphate, magnesium chloride and other minerals. A \$10-million plant came on stream in Utah during the year to process ore from the Brush beryllium mine near Spor Mountain, and another is planned for the same area.

**Iron Ore** A major iron-ore deposit, discovered near Yerington, Nevada, is estimated to contain a quarter-billion tons of iron ore, three-tenths of one-percent of which is copper. This discovery could lead to the location in this region of a basic steelmaking facility, or a copper mine and processing plant.



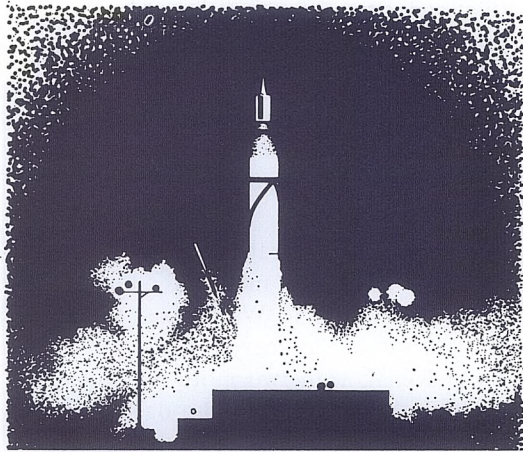
**Gold** Operations began last year at the \$9-million Cortez open-pit mine and mill, which quickly became the third largest producer of gold in the nation. This leach cyanide plant now turns out more than 400 ounces of metal daily.

**Silver** Development and exploration in the Coeur d'Alene district of Idaho increased, as silver producers prepared for the day when the U.S. Treasury ceases to supply silver to the market. At the Sunshine mine, construction began on a \$2-million refinery to handle 2,000 tons of concentrate per month. Work is in progress to deepen shafts at the Galena, Lucky Friday, Star-Morning and Crescent mines.

Some \$17-million worth of exploration projects are under way in this district, including exploration at a depth of at least 4,500 feet in the Caladay area. Other important projects include exploration of a block of claims comprising the Coeur Project near the Galena mine; exploration at the Camp and Consolidated Projects; and diamond drilling at the Crescent Evolution property, west of Osborn.

**Petroleum and Gas** Exploration and development of oil-and-gas projects continued at a high rate during the year. One firm announced it would spend \$11 million during 1969 to drill 144 wells. Another company planned \$10 million for expansion of a 21,000-barrel-a-day catalytic cracking unit in Salt Lake City.

**Aerospace** Arizona firms received defense contracts for \$23 million of bomb fuses and radar sets, and \$13 million for automated data-processing systems. A Utah firm won an Air Force contract of \$20 million for constructing first-stage Minuteman missile engines, along with \$42 million for building and testing a prototype version of a hardened Minuteman missile site near Cedar City, Utah.



**Construction** Commercial construction continued at a high level, as plans for major hotels, shopping centers and condominiums included: a \$150-million, 4,000-room hotel addition in Las Vegas; a \$60-million planned community in Tempe, Arizona, consisting of garden apartments, a shopping center and hotel; and a \$35-million shopping center in Murray, Utah.

Under study is a multi-purpose nuclear desalting plant in the Great Salt Lake area which could cost over \$1 billion. The plant would have maximum capacity of 100 million gallons-per-day of desalted water, 1,000 megawatts of power, and 1.32 million pounds-per-hour of processed steam.

Other utility building plans include a \$600-million, 5-million-kw coal-fired power plant near Lake Powell, Utah, and a \$300-million generating plant in Salt Lake City. Also on the drawing boards is a \$300-million electric-generating plant with a capacity of 2.3-million kw near Page, Arizona.

### Alaska and Hawaii

**Petroleum and Gas** The after-effects of the oil strike on Alaska's North Slope dominated the news in 1969. The year witnessed a \$900-million sale of oil leases, as well as advanced planning for construction of a \$900-million, 800-mile Trans-Alaska pipe-

line system. The oil reserve on the North Slope is reported to be the richest ever found in the U.S., with estimates of recoverable reserves ranging from 15 billion to 40 billion barrels. Some 13 oil firms are already drilling in the area, and more are scheduled to follow.

A major oil company has announced it will spend up to \$90 million for three tankers to haul its oil to West Coast refineries. Construction of a refinery is nearing completion at Kenai, with two more scheduled for Fairbanks. A 1,000-barrel-a-day crude-oil topping plant at Prudhoe Bay will produce Arctic fuel for heating units and heavy-equipment engines. In Hawaii, meanwhile, construction is under way on a \$60-million oil refinery at Barbers Point, Honolulu, with a capacity of 50,000 b/d.

**Forest Products** A U.S. company has entered into a contract with a Tokyo-based paper company calling for the sale of \$600-million worth of Alaskan pulp and lumber over a 15-year period. Shipments will come from a \$75-million pulp and sawmill complex the company expects to complete in Alaska in 1973.

**Construction** The oil strike brought a building boom to Alaska, particularly in the hotel, commercial, and apartment-house fields. Plans were announced for "Seward's Success—The Twenty-First Century City" to be built on some 3,200 acres in Anchorage. Scheduled for completion in five years, the city will be built in four phases, each accommodating 5,000 persons. It will be a totally enclosed and climate-controlled city

with office facilities, commercial mall, sports arena, schools, residential mall, and transportation system of moving sidewalks without automobiles.

The construction of hotels, condominiums and apartment houses continued at a rapid pace in Hawaii. Long-range plans were announced for several resort communities, complete with residential, commercial, and recreational facilities, on Oahu and neighboring islands. Major projects planned or under way include: the \$850-million Wailea Pua Kuleana (City of Flowers) at Wailea Beach on Maui; the \$446-million South Kohala development and a \$300-million regional ocean-side development on Hawaii; and a \$244-million resort town on Molokai.

**Public Utilities** The \$50-million Snettisham hydro-electric power plant near Juneau is scheduled for completion in 1972. It will supply 46,700 kw of power from the Long Lake portion and 23,350 kw from the Crater Lake portion of the project. In the planning stage is a power-generating complex near Fairbanks, capable of producing up to 45,000 kw of electricity for existing utility firms.

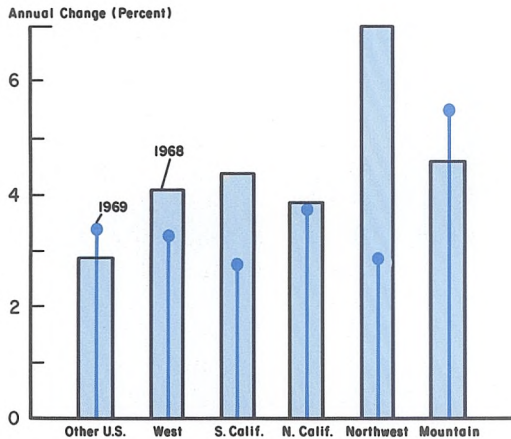
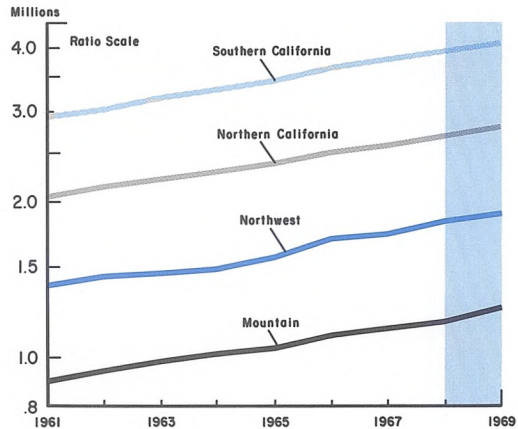
A Hawaii utility earmarked \$27 million for capital expenditures in 1969 and another \$143 million for the next five years. Under construction, at an \$18-million cost, is an 86,000-kw generating station in Honolulu.

**Transportation** New Pacific airline route awards, along with the advent of the jumbo jets, have necessitated a \$250-million master plan to expand the Honolulu International Airport. Development work may continue through 1985, with one key feature being the completion of a reef runway in 1972.



# Growth and Diversity

Growth and diversity continued to be the twin hallmarks of the Western economy in 1969. Nonfarm employment increased during the year in each of the District's four major regions—and over the entire course of the decade, each of these areas recorded at least a one-third increase in employment. Southern California alone employed 4.1 million workers in 1969—more than any single state except New York, Pennsylvania, Illinois, and California itself. Northern California employed 2.8 million workers, the Pacific Northwest 1.9 million, and the Mountain states 1.2 million.



Each of California's major centers grew at a slower rate, the slowdown being most marked in the state's focal point, Los Angeles-Orange County. Honolulu, in contrast, posted another strong increase in employment. In the Northwest, formerly booming Seattle slowed considerably, but the outlying center of Anchorage sharply expanded its job opportunities on the basis of the Alaskan oil boom. Growth patterns varied, city by city, in the Mountain area—but booming Phoenix continued to boom.

Nonetheless, the growth pace slowed somewhat in the West during 1969. Nonfarm employment grew by about 3.4 percent—roughly in line with the national increase, but below the region's 4.1-percent figure of 1968. Southern California and the Pacific Northwest accounted for the slower pace; both areas scored respectable employment gains in 1969, but nothing to compare with their sharp 1968 gains. In contrast, Northern California moved ahead at close to its 1968 pace, while the Mountain states recorded a substantial advance.

