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Editor: William Burke

Birthday in Basle

May 17 marked the fortieth anniversary of the Bank for International Settlements, the unique financial institution located in Basle, Switzerland. This mixed private-public institution—founded in 1930 as a result of the Young (reparations) Plan —barely survived the crises of depression and war, but it then developed as a significant force in the postwar financial world. Although it operates mainly in the industrial countries of Europe, it will undoubtedly play a larger role on the world stage as time goes on.

The leading European central banks created the BIS partly as a center for the promotion of central-bank cooperation — but also as a vehicle for collecting reparations from Germany, and for transferring those funds to the Allied Powers. The reparations problem had originated with the Versailles Treaty, and during the 1920's was the subject of a number of international negotiations, mostly associated with the names of Dawes and Young.

The Dawes Plan of 1924 provided for a schedule of payments of annuities and for the floating of loans to help raise funds for initial operations. But the more definitive Young Plan (1930) provided for a more flexible system of annuities, the consolidation of the reparations debt, the issuance of another international loan—and for the creation of the BIS.

The Bank was established with an initial capital of 500 million gold francs — about $165 million in post-1934 terms. This sum was underwritten by the central banks of Belgium, the U.K., France, Germany and Italy, and by American and Japanese commercial-bank consortia in lieu of the central banks of those two nations. (The U.S. did not officially participate.) The underwriting central banks retained all voting rights in the institution, although they could sell off their shares if they so desired. Moreover, each voting central bank could exercise veto power over any BIS operations within its own borders.

The BIS was authorized to transact business, on both sides of its balance sheet, in gold and short-term obligations of prime liquidity, including both bills of exchange and Treasury bills. (However, it was barred from issuing bearer demand notes.) Within the limits of its somewhat conservative in-

vestment policy, the Bank could operate for its own account, act as correspondent for other central banks (and to some extent, for private bankers as well), and act as trustee or agent for any international agreements entrusted to it—specifically for the Young Plan agreements. The trustee for the Dawes Plan bonds also delegated its functions to the BIS, thus making that institution a party to all of the reparation loans of the period.

The Young Plan, with its conception of an international-settlements bank, was a product of the optimistic atmosphere of the late 1920's. Yet, before the ink had dried on The Hague agreement implementing this Plan, the New York stock market crashed. Moreover, by the time the BIS had opened its doors, the Little Bull Market of 1930—the Twenties' last roar—was all but a memory. Even though the Bank was born at a most unlucky time, its strict standards of financial probity turned out to be well suited to the difficult atmosphere in which it had to work.

Indeed, for the first year of its life, the BIS was able to carry out its tasks just as originally planned. The Bank consolidated the reparations package with a $300-million (pre-1934 weight) gold-equivalent international loan, which yielded $200 million for Germany's creditors and $100 million for Germany. In its first fiscal year, moreover, the BIS collected over 1,600 million Reichsmarks—roughly $500 million in today's U.S. dollars. Following the Young Plan formula, the BIS allocated RM 125 million in various currencies for debt servicing, RM 125 million in gold francs for the creditor nations' required trust-account balances, and RM 600 million for blocked balances against reparations in kind—and it credited most of the remaining RM 800 million to unblocked accounts of creditor countries.

Trial by ordeal

The BIS was only a year old when the financial tornado struck Europe, beginning with the failure of the Credit Anstalt in Vienna. But contrary to its meteorological counterparts, this tornado moved swiftly northwestward, dislodging the gold standard from Austria, Germany and the U.K. within only three months time. The BIS became a leader in rescue operations, committing $25 million of a $100-million support package for the Reichsbank, and participating in a $26-million package for the National Bank of Hungary—and it was influential as a broker even in those operations where its own funds were not committed.

The total amount of intercentral-bank assistance, which reached $1.6 billion in current dollars, may seem small by today's standards, considering that the Bank of England alone received perhaps five or six times that amount in the 1965-68 period. Still, according to the Bank's 1931 report, those emergency credits amounted to about 10 percent of the total short-term indebtedness outstanding in international financial markets at the beginning of 1931.

The Bank saw its original functions practically wither away during the depression years. In August 1931, Germany stopped payment on the conditional portion of its reparations obligations, and in July 1932, it suspended payments completely. Finally, in mid-1934, Germany defaulted on the Dawes and Young Plan bonds themselves. Treasuries and central banks meanwhile withdrew their BIS deposits for use in their own money and exchange markets, and the Bank's balance sheet quickly shrank from a peak of 2 billion Swiss francs (1931) to only Sfr 600 million, where it remained throughout most of the following decade.

Even so, the BIS managed to transact a minor amount of business during the 1930's. Until the Anschluss, the Bank continued to handle the servicing of Austria's debts. During the transfer of the Saar, it acted as trustee for the financial arrangements involved, which included currency exchanges as well as German cash (and coal) payments to France.

The universal abandonment of the gold standard seriously circumscribed the scope of BIS operations, which were by statute limited to currencies that satisfied the practical requirements of the gold or gold-exchange standard. Rather than suspend banking relations with the greater part of its customers, the BIS evolved a new service—a system of operations involving earmarked gold and gold deposits—that enabled its customers to transfer gold among different markets with a minimum of physical shipments. This system substantially protected the Bank against exchange risks, and it even proved profitable—no mean consideration in an era of super-cheap money that sharply curbed the Bank's opportunities to earn its way with interest receipts.

Trial by fire

As the war clouds gathered in the late 1930's, the BIS assisted many nations in transferring their gold reserves to New York. The Bank at that time maintained most of its own assets in New York, but this situation soon became a source of difficulty because the U.S. had not been a party to The Hague Convention that established the Bank. Hence, the U.S. Treasury could not be held to the Convention's guarantee of BIS immunity from governmental interference, and it moved to block BIS assets despite the Bank's strict self-imposed limitations on the operations it would undertake during the period of hostilities.

The Bank was thus hit very hard in 1941, when the U.S. Treasury sequestered BIS assets and extended its wartime system of exchange licenses to dealings with Switzerland. BIS wartime activities were confined to research, fiscal-agency functions for the International Red Cross and the International Postal Union, and the collection of interest payments (in gold and Swiss francs) that were exempted from German wartime controls on the investments made in Germany in 1930-31.

Neutrality, however, is a policy that tries the patience of belligerents, and the BIS found that it had a number of enemies among the United Nations when they convened at Bretton Woods in 1944. The conferees, believing that the Bank's functions would be effectively superseded by the International Monetary Fund and the World Bank, passed a resolution calling for the dissolution of the BIS "at the earliest possible moment."

This resolution was never implemented. The Bretton Woods conference had no authority to dissolve the Bank, and before the legal steps necessary for dissolution could be taken by the BIS membership and guarantors, the Bank proved sufficiently useful in those turbulent times that many of its opponents reversed their stand.

Even so, V-E Day had a disastrous effect on the BIS balance sheet. The conclusion of the war froze the Bank's German assets—and of course most of its other assets had already been blocked by the U.S. Government in 1941. The Bank tried strenuously to free its funds, but the U.S. demanded that the Bank surrender whatever gold had been looted by Germany and paid to the BIS during the war. The Bank, however, was able to prove clear title to all except 13 percent of its wartime net gold acquisitions. The BIS surrendered this gold (10 million gold francs) to an allied commission, and in May 1948 finally secured the release of its assets.

Rebirth: Bank of Europe

At this time, just as the Marshall Plan was getting underway, the IMF suspended its own credit operations *vis-a-vis* Marshall Plan recipients, leaving in Europe an unsatisfied demand for a central banker's bank. The BIS soon filled this function, and thus played a major role in the continent's movement back to industrial recovery and international currency convertibility. The Bank provided technical assistance, increased the sophistication and scope of its gold operations, served as trustee for the initial loans of the European Coal and Steel Community, and secured a settlement of the Dawes and Young Plan bonds. In addition, it managed the OEEC's clearing plans—the early bilateral plans of 1947-49, the more sophisticated European Payments Union of the early 1950's, and finally the return to external convertibility under the European Monetary Agreement of the late 1950's.

From its lowpoint in the 1946 fiscal year, when it posted its only net operating loss and reported only $66 million in assets (outside of Germany), the Bank recovered rapidly. Because of the cheap-money policies pursued in most major nations, its interest income remained depressed until the early 1950's. Yet in due course, with the restoration of central-bank independence — which the BIS actively supported — interest rates rose and the BIS began, literally, to reap dividends. With the resumption of interest payments on the German debt in 1953, interest once again became the Bank's major source of income. By 1957, its assets reached some $700 million.

Throughout the 1950's the Bank's major preoccupation—as a respected financial commentator and as manager of the EPU — was the restoration of convertibility in Europe. At the end of December 1958, this dream was realized and the BIS again lost a major function. But once again the Bank was able to transform itself and assume new and expanded responsibilities.

As the 1960's opened, the leading financial powers faced the realization that something was wrong with the U.S. balance of payments and with the world's gold markets. The first shock was the wave of speculation that drove the price of gold in London to $40 in October 1960. Then, as the decade developed, the weakness of the American bal-

Basle

Basle, a medieval Rhenish city that is dominated by the spires of its twelfth-century Gothic cathedral and has long been a thriving center of the chemical industry, was originally chosen as the site of the Bank for International Settlements because it was a nodal point for European railways. Now that most international bankers habitually travel by plane, that asset has become a liability, for there is no long-distance air travel to Basle; delegates must deplane at Zurich and continue by train or car. On the other hand, Basle has several first-rate restaurants, and it may be that in the view of the central-bank delegates this advantage outweighs the travel inconvenience, for central banking — or at least European central banking — has a firmly established association with good living.

John Brooks
Business Adventures (1970)

ance of payments provided the backdrop against which were played two deutschemark crises, three sterling crises, and a host of developments centered around Eurodollars and monetary reform plans.

Throughout its history, the BIS has provided a forum where central bankers could maintain a continuing, intimate contact. This function has assumed perhaps its greatest importance just within the past decade. The official board meeting each month is attended only by the governors of eight European central banks (the five founders plus Switzerland, Sweden, and the Netherlands), but the less formal working-group meetings and the annual general meeting bring together the governors and experts of most of the world's major central banks for far-ranging discussions of the world's economic and monetary situation. (These meetings, incidentally, provide a forum for discussions between Eastern European and Western European central bankers.)

Proceedings at Basle are one of the world's better-kept secrets, yet some of their results can be charted in the Bank's and other public documents. For instance, the BIS has participated in the widespread system of swap credits, with the Federal Reserve and with other central banks. Moreover, the BIS took part in two support operations for sterling — one in 1966 and the other in 1968. The BIS is also the agent for Working Party 3 of the OECD, collecting and disseminating central-bank data and providing perceptive analyses of worldwide economic developments. In this regard, the BIS published as early as 1964 a detailed account of the Eurodollar market, and it remains today one of the foremost sources of information on Eurocurrencies.

Expansion: present and future

The 1960's were good years for the BIS, not only in terms of its influence, but also in purely financial terms. Its assets nearly quadrupled between 1959 and 1969, reaching some $5 billion toward the end of the period, largely because of its role in the 1966-68 sterling aid arrangements. On the other hand, its gold business with private markets has declined drastically since the establishment of the two-tier gold system. However, its portfolio has yielded a satisfactory income in recent years, enabling the BIS to make good an earlier deficiency in its 6-percent cumulative dividend, and to pay in 1968 and 1969 the then-statutory maximum dividend, which amounted to 12 percent on paid-up capital. As a part of a major reorganization last year, the Bank distributed a 100-percent stock dividend.

In 1969, the BIS ratified its newly expanded role. It tripled its authorized capital, and admitted two important non-European members, Canada and Japan. (Japan had been one of the original adherents, but it later renounced its claims under the 1951 Peace Treaty.) Although the U.S. Government has shown little interest in becoming a party to The Hague Convention, the Federal Reserve has maintained increasingly active contact and cooperation with the BIS over the past decade, and is frequently represented at the monthly working-group meetings.

Thus, at the age of 40, the BIS has never looked healthier. Its financial position seems secure, its political opponents are few, and its reputation for faithful service to its clients survives intact. For the OECD countries, the BIS provides services which complement those of the IMF. What the BIS may lack in resources, it compensates with greater liquidity and flexibility—and with the proverbial secrecy attributed to Swiss bankers.

In the '70s the BIS undoubtedly will continue to serve as a major European institution. It will continue to manage the European Monetary Agreement, whose Multilateral System of Settlements insures each member against capital losses on reserves caused by the devaluation of any other member's currency. It will manage the Barre Plan for short-term mutual assistance within the EEC, and it will probably be one of the leading architects of European monetary integration. At the same time, the BIS will look outward from Europe; with the re-accession of Japan, for example, the BIS will undoubtedly become involved in the technical questions surrounding the liberalization of Japanese trade barriers.

More generally, with the spread of convertibility, the BIS is well-placed to assume some functions of a world central bank, in a sense evolving towards the international counterpart of the Bank of England's Banking Department. The BIS already performs clearing functions in connection with the International Postal Union, as well as the rudiments of discount-window operations in its swap credits and gold loans. The Bank also performs open-market operations in the Eurodollar market, and some of its members have granted the BIS standing authorization to enter their own money markets. These Banking Department functions should certainly evolve further, as the sphere of central-bank cooperation expands and further progress is made towards harmonization of national economic policies.

Richard Gorin

Fortieth Annual Report

The Bank for International Settlements, in its just-released 40th annual report, called for the inclusion of an incomes policy in the world's arsenal of anti-inflationary weapons. Citing the worldwide prevalence of inflationary pressures—of the cost-push as well as the demand-pull variety—the BIS argued, "Few central banks or ministries of finance would dissent from the view that incomes policy cannot make up for the inadequacies of other measures. At the same time, few would profess faith that wage push can be dealt with by monetary and fiscal actions alone."

Analyzing the international economy on a country-by-country basis, the report said that an accelerating inflation of wages and prices was a major problem in almost all nations throughout 1969, and into 1970 as well. "The rises of consumer price indexes clustered around 5 percent, while for wages the typical figure was about 8 percent. Thus, inflation was well beyond a creeping pace."

Excessive demand was the major cause of upward price pressures in several of the leading industrial nations, conspicuously in Japan, Germany, Sweden, and the Netherlands. In other countries, such as the U.S. and the U.K., the dominant factor cited was soaring labor-cost increases.

In the international monetary area, the Bank declared that tension generally has eased, because of the creation of Special Drawing Rights in the International Monetary Fund, the upward revaluation of the German mark, and the improvement in the British pound and French franc. But, cautioned Chairman Jelle Zijlstra, these accomplishments "have tended to deal more with symptoms than with causes of our economic and financial malaise."

Housing: Old Problems

Everything considered, 1969 was a pretty good year for Western homebuilding. On the heels of 1968's 33-percent gain, housing starts in Twelfth District states rose by an additional 9½ percent during 1969, to 323,000 units. The West's 1969 pace looked even better when compared with the 3-percent drop in housing activity recorded elsewhere in the nation.

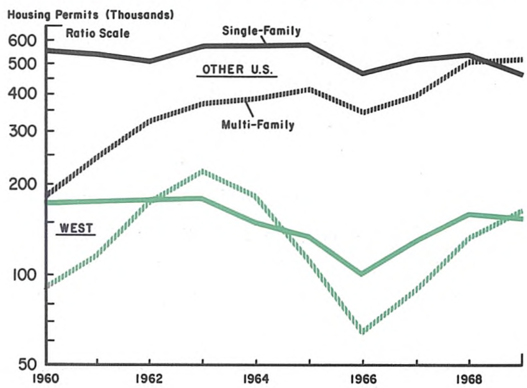
The 1969 figure of 323,000 starts fell roughly halfway between the 1963 peak and the 1966 lowpoint of housing activity. However, the 1963 rate of construction was substantially in excess of basic demand, and thereby contributed to a sharp rise in the inventory of unsold housing and to soaring vacancy rates. These factors propelled homebuilding into a 38-percent decline in the two years prior to the tight-money period of 1966, and starts then declined 33 percent during that year. This shake-out then prepared the path for the strong advance of 1968-69.

The recent advance was restrained by fairly sharp declines in homebuilding in some District areas. In Washington, for example, a substantial reduction in aerospace employment last year limited the overall gain in jobs, income, and basic housing demand, and, in conjunction with a tightening credit situation and a rising inventory of unsold housing, contributed to a 30-percent decline in housing starts.

Problems of growth

In most major metropolitan centers except Seattle and Portland, the homebuilding pace (measured by permit data) advanced strongly during 1969. Housing starts jumped 14 percent in California, on the basis of a sharp upsurge in the important Los Angeles, Orange County and San Diego markets. Similarly, sharp gains in the main urban centers of Arizona and Nevada boosted housing starts in these states to levels 35 percent or more above those of the preceding year, while fairly good increases in Salt Lake City and Honolulu were responsible for modest gains in homebuilding in Utah and Hawaii. In fact, twelve principal urban centers posted a 20-percent gain in homebuilding activity

Housing starts, especially multiples, hold up better in West than elsewhere



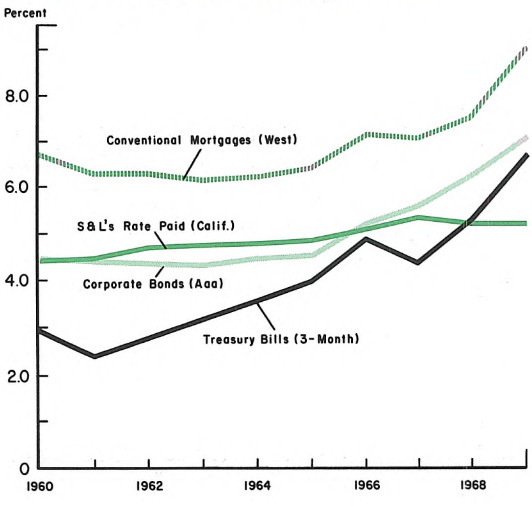
during 1969, and accounted for virtually all of the District's 29,000-unit net gain in construction.

The concentration of homebuilding in these urban (and suburban) centers reflected their continuing population growth, which has occurred despite a significant decline in in-migration and in overall population growth in the West generally. In these areas, too, demand pressures upon the available housing supply have continued strong, and thus have helped account for low vacancy rates, rising rents, and rising home prices.

In southern California, and also in Phoenix and Boise, housing vacancy rates dropped to a little over 2 percent last year, while in San Francisco and Honolulu, vacancy rates dropped even lower. Moreover, in southern California (six-county area), the inventory of completed but unsold tract housing totalled only 4,700 units in late 1969, less than one-third of the 1964 level. Foreclosure rates in every District state also continued to decline in 1969, to levels substantially below those prevailing several years ago.

At the same time, rental and home-ownership costs throughout the West rose substantially during 1969—even more than they did in the rest of the nation, in most cases. Rental costs increased by 4 percent in Seattle, 6 percent in San Francisco, and 8 percent in San Diego, and home-ownership costs rose even faster.

Mortgage rates soar, as S&L's suffer from shortage of mortgage funds



The Western construction industry concentrated its efforts last year in the construction of multiple units. Indeed, construction of multiples jumped by 25 percent, while single-family construction actually declined. Thus, multiples accounted for just over 50 percent of all new homes built, compared with only 45 percent in 1968.

Problems of credit

The chapter labeled "credit" was also important in last year's housing story, just as it had been in 1968. Effective yields on conventional new-home loans rose by about 1½ percentage points in 1969, to a record 9 percent—substantially above the national average. This rise was part and parcel of the widespread increase in market interest rates which developed as virtually all sectors of the economy, public and private alike, scrambled for funds to finance higher levels of expenditure.

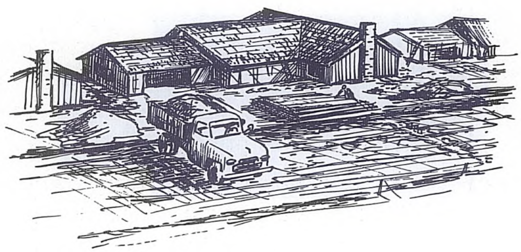
But in the West, even more than in the rest of the nation, the upsurge in rates reflected not only the pressures of the strong credit demands of builders and would-be home buyers, but also the net reduction in the supply of funds available to institutional mortgage lenders. Savings-and-loan associations in District states suffered a net outflow of about $160 million—California and Nevada S&L's lost several times that amount, but their losses were offset by gains elsewhere—while District commercial banks sustained a net loss of $545 million in consumer-type time deposits.

Depositary institutions were hampered in their search for funds not only by an overall decline in consumers' savings, but also by a sharp rise in market interest rates to levels considerably above the legal ceilings which these institutions could pay on their deposits. The commercial banks and the S&L's, limited by ceilings of 4 percent and 5 percent, respectively, on their regular passbook accounts, encountered great difficulty in competing for the funds of an investing public which increasingly opted in favor of such higher-yielding instruments as Treasury bills and corporate bonds. Over the course of the year, the yield spread between three-month Treasury bills and 5-percent S&L passbook accounts (or bank certificate accounts) jumped from about ½ percentage point to a full 3 percentage points.

Despite the increasingly stringent financial situation, these depositary institutions managed to expand their mortgage-lending activities during 1969. District commercial banks increased their outstanding loans by $626 million; this was not much more than half the previous year's gain, admittedly, but the banks also recorded heavy sales of loans out of portfolio to other investors. (Incidentally, California contained four of the nation's five leading banks in the mortgage-financing field.) Meanwhile, District S&L's and mutual savings banks increased their outstanding loans by $2.1 billion, or slightly more than they did during 1968.

The S&L's financed their loan expansion in part by liquidating holdings of cash and U.S. government securities—helped along by a late-year reduction in their liquidity requirements—and in part by increasing their borrowings from the Federal Home Loan Banks. Borrowing by S&L's in Twelfth District states rose by $1.6 billion over the year to $4.3 billion—a volume equal to about 14 percent of the associations' own funds, and also equal to about 45 percent of the entire national total of S&L borrowings.

At the same time, the S&L's (and the banks) responded to the hemorrhage in their savings flows by reducing sharply their commitments to make future mortgage loans. Thus, between the spring peak and the winter low, S&L's cut their commitments about 40 percent to $400 million. Still, commitments firmed up in early 1970, despite the continued savings outflows.

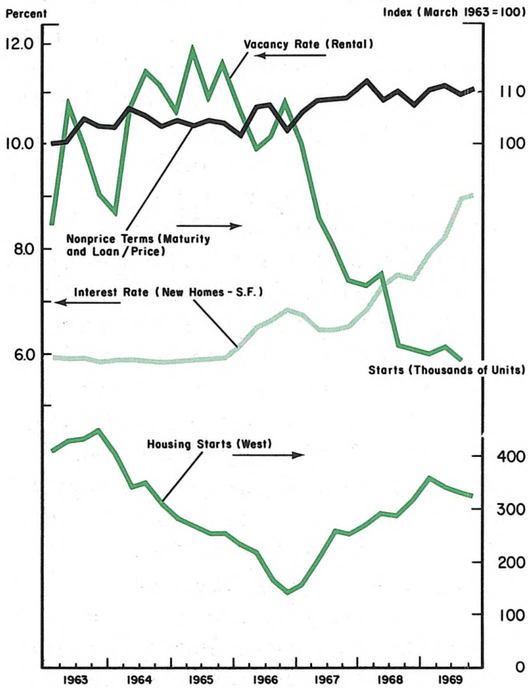


Problems of 1970

Homebuilding prospects today depend considerably upon general developments in the nation's credit markets. Corporate demands for external financing may be somewhat less strident than heretofore, although the most recent survey of business fixed-investment expenditures points to a continued rise in such expenditures. But Federal Government demands on the credit markets may be fairly heavy, because of the near-certainty of a deficit in fiscal 1971. In the state-and-local government sector, meanwhile, the backlog of projects awaiting even a slight reduction in financing costs creates a potentially heavy volume of demand upon the credit markets.

Much will depend upon the savings attitudes of consumers—whether they increase the amount of their savings out of disposable income and whether they allocate more or less of their savings to the depositary type, mortgage-lending institutions. (In an attempt to encourage increased savings of this type, the regulatory authorities this January raised ceiling rates on both bank and S&L passbook and certificate accounts.) But so long as market yields on other investments remain in the neighborhood of their recent levels,

Tight credit causes construction to weaken, despite low vacancy rate



any such shift of funds is not likely to be very great. Also, much will depend upon the attitudes of financial organizations — whether depositary institutions allocate more or less of their available funds to mortgages, and whether Federal agencies, in directly providing funds for housing, finance their activities through market issues that drain away private funds that would otherwise have moved immediately into home finance.

Moreover, prospective homebuyers continue to be faced with a high level of financing costs, because of the higher price which mortgage-lending institutions must now pay for funds, both in the form of savings deposits and (in the case of mutuals and S&L's) in the form of borrowings from the Home Loan Banks. Would-be buyers are also faced with a sharp increase in monthly payments, because of the rise in home prices created by the growing scarcity of land, rising materials prices, and rising wage rates in the contruction trades.

Thus, a combination of factors—including a growing inventory of unsold housing in a certain number of localities, the continued difficulty experienced by mortgage-lending institutions in attracting new funds, and the growing sensitivity of both apartment builders and homebuyers to the sharp uptrend in housing costs—point in the direction of a 10-percent decline in Western housing starts, to a level of perhaps 290,000 units for the year. (That figure would actually be about 14 percent above the pace of activity in the first four months of 1970.) The estimate assumes a continued substantial volume of secondary-market purchases by the Federal National Mortgage Association, and assumes also an increased inflow of loanable funds into the principal mortgage-lending institutions as the year progresses.

Helping housing

Some of the attempts to "help housing" in its present difficult situation center around programs for reducing housing costs, primarily through "Operation Breakthrough"—the program designed to provide housing units for $15,000 or less through factory or mass-production techniques. But while some of the firms involved have reported successes, others have encountered difficulties in meeting specifications within the $15,000 ceiling. This suggests that an increasing share of the low-cost housing supply will be met by mobile-home builders, which already account for 90 percent of the nation's home sales in the $15,000-and-under price bracket, and which last year sold some 44,000 units in District states.

Still, most of the present efforts to "help housing" center around ways of surmounting the industry's present financing crisis. HUD Secretary Romney last February discussed a number of proposals which are now under consideration in the Congress.

One of these proposals would authorize $250 million in Treasury subsidies to the Federal Home Loan Banks to enable the latter to reduce the interest rate which they charge on advances to savings-and-loan associations. In fact, the Home Loan Banks already have permitted S&L's to refinance their outstanding borrowings at 7½ percent—down considerably from the prevailing rate of 7¾ percent—with the understanding that the S&L's will use the funds for mortgage lending rather than repay them as short-term borrowings. Still another proposal already has come to fruition in the recent marketing by FNMA of some $400 million in mortgage-backed bonds, guaranteed by GNMA (Government National Mortgage Association). The risk-free bonds are designed in part to attract the funds of some types of investors (such as pension funds) which heretofore have not engaged in a substantial volume of mortgage financing.

Another suggestion now being considered is the creation of secondary-market facilities for conventional mortgages in both the Home Loan Banks and the Federal National Mortgage Association, similar to the facilities which FNMA now operates for government-backed mortgages. Yet another measure, already adopted by the Senate and under consideration in the House, would increase the authorization of GNMA special-assistance functions (including the interest-subsidy programs for low-income home buyers) by $1.5 billion, bringing the total of special-assistance funds to $4.5 billion.

Some groups would suggest the use of tax incentives, either in the form of exemption of a portion of the interest earned by savers on their deposits in mortgage-lending institutions, or the exemption of interest earned by lenders themselves on residential mortgages. Finally, some would suggest comprehensive credit controls—and perhaps even wage and price controls. Last month, in fact, Secretary Romney warned that unless the various participants in the housing market come up with some "long-lasting solutions" to the problem of home financing, an eventual Federal takeover of all mortgage lending may be in prospect.

Verle Johnston

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Housing: New Techniques

Given present technology, the cost of housing has gone almost out of sight for the "average" home-buyer or apartment-hunter. But given new technology, the millions of new households of the 1970's should be able to find livable accommodations at reasonable prices.

All segments of the housing industry — architects, engineers, manufacturers, land developers, builders, construction workers, and urban experts—are increasingly aware of the need for meeting efficiently and inexpensively the growing demand for housing. Their solution to the problem will undoubtedly involve the adaptation of mass-production techniques to basic industry procedures.

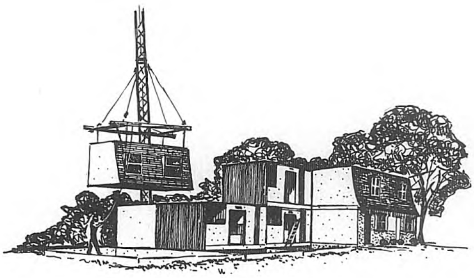
Assembly-line operation

In place of a cut-and-fit, hammer-and-nail type of operation, an industrialized-housing system brings material and prefabricated parts together on an assembly line, and there combines these units into large-scale building units. One approach involves prefabricated housing, which builds upon metal skeletons or concrete slabs, and another involves modular housing, which produces complete sectional units.

Prefabricated housing involves factory manufacture of wall components, roof trusses, and floor sections, followed by on-site completion of these factory units. (Smaller units generally use a skeleton system, with the metal frame supporting the weight, while larger units frequently use a slab system, with concrete slabs supporting the full weight of the building.) Modular housing involves the manufacture of movable dwelling units (or sectionals) on a factory assembly line, and the installation of these completed units at a prepared construction site, sometimes in high-rise form through vertical stacking of units.

The concept of industrialized housing is not new, having been actively discussed for decades, but the widespread use of factory techniques in the sometimes hide-bound construction industry has been a somewhat recent development. Even so, there are increasing signs of change—witness the introduction of computerized building design and production scheduling, along with the growing acceptance of new types of materials (reinforced concrete, plastics) and of basic assembly-line techniques. On the strength of these developments, the factory-based industry claims that it can easily outperform the conventional housing industry in terms of producing a standardized low-price product in minimum time.

Factory-built modules and panels involve only a few days (or even hours) for on-site assembly, whereas traditional on-site production involves an uncertain amount of time, because of delays caused by problems of weather or piece-work handling. Industrialized housing also is considerably cheaper than conventional housing, since it utilizes semi-skilled factory workers rather than highly skilled construction workers, with materials and prefabricated parts being combined into large units on the factory floor and then assembled on site with a minimum of craft-worker participation. Moreover, this approach turns out a standardized product of even quality, because of its reliance on factory-tested prefabricated materials and structural elements.



Breakthrough operation

Operation Breakthrough, the new plan unveiled by the Department of Housing and Urban Development after the passage of the Housing Act of 1968, represents the largest attempt to date to introduce industrialized-housing concepts into the housing industry. The program was designed, in part, to stimulate private industry to introduce the efficiencies of mass production into craft-style piece-work operations. In addition, it was designed to persuade political jurisdictions to repeal restrictive building codes which limit the use of such materials as precast concrete and plastic pipe, and to persuade them to repeal restrictive zoning regulations which limit certain types of large-scale land use.

As a result of the HUD competition, 22 industrial firms (out of 236 competing groups) have been selected to build 2,000 units of prototype housing at ten different sites throughout the country. (But local governing bodies are still withholding permission for actual construction in five of the cities selected, including Seattle.) These prototype units will be tested to determine the physical capabilities of materials, and perhaps more important, they will also be tested with an eye to buyer and community acceptance of the final product.

The winning proposals in Operation Breakthrough involve a variety of industrial techniques—ranging from complete factory production of modules to on-site poured-concrete construction. The proposals also involve a variety of materials — 7 designs with concrete, 6 with wood, 5 with structural metal, 2 with plastic foam-core panels, and 2 with fiberglass—but in general they represent a switch from a potentially scarce material, wood, to such relatively abundant materials as concrete, metal, and plastics, all used in innovative ways.

The future of industrialized housing lies, in the last analysis, with the consumer acceptability of new designs of the type developed through Operation Breakthrough. Consumers frequently view this type of housing as aesthetically undesirable or structurally unsound, even when this is not the case. Sometimes, too, they complain about the use of standardized units to provide a monotonously designed product. Yet, with improvements in modular and other types of industrialized housing, a growing demand should develop from those who are priced out of the market for conventional housing.

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Western Digest

Bank Credit Contracts

In May, loans at large Twelfth District banks declined by $124 million and security holdings dropped by $10 million. . . . Business loans fell by $211 million as corporations repaid their tax borrowings. Consumer instalment credit continued the downward trend which has prevailed so far this year, but there was a rise of $32 million in real estate loans during the month. . . . Banks made little net change in their investment portfolios. However, there was substantial shifting out of Treasury bills into short-term Treasury notes and municipal warrants.

Deposits Flow In

Large District banks posted a $47-million increase in demand deposits (adjusted) during May, and they also gained $269 million in time deposits. . . . Passbook savings rose $109 million — enough to offset the April tax-payment outflow. Other time deposits of individuals and corporations (including large negotiable CD's) rose during the month. But April's large seasonal inflow of public time deposits was reversed in May.

Aerospace Decline Continues

Aerospace employment continued to drop in April — some 5,800 in California and 7,500 in Washington. In part, this reflected a 12-percent decline (to $1.5 billion) in military prime-contract awards between first-quarter '69 and first-quarter '70. But despite this decline, the District's share of total awards increased slightly during the period.

Housing Picture Mixed

Western housing starts dropped 19 percent during April to a seasonally adjusted annual rate of 212,000 units, the lowest level since May of 1967. In contrast, the volume of permits issued jumped 31 percent in April to a 353,000 annual rate, as the West far surpassed the 8-percent gain recorded in the rest of the nation.

Copper Prices Drop

By early June the spot price for copper on the London Metal Exchange dropped to 66½ cents from the March peak of 81¾ cents a pound. An improved supply situation, along with a slowdown in fabricators' demand, contributed to the downward pressure on prices.