

Re Capt. Trap

✓ Think what a Δi does to credit rationing.

At 0 int., lenders (mortgages) would lend any amount.

At 1%, penalty for slow payment is still small

At 10%, borrowers (mortgagors) are worth much less. Collateral shrinks, but aside from that, borrower w. no collateral, or little, save what the loan itself buys, must put more into interest, can $\therefore$ put less into retiring

✓ principle. If it's a long loan, eply., where payments are mostly interest, Δi cuts big % chunk out of ~~ann-n.~~, so payments on long loans wd. rise relatively more

$$c = C_0 \frac{i}{1 - (1+i)^{-t}} \quad \text{than short, moving people to short loans.}$$

This cd. work both ways, maybe cyclically. It could be that as i rises, causes at first extending maturities, to avoid big rise of periodic payments, c . Later, reverse?

Or maybe is consistent simple pattern from start.

Lengthen terms, but reduce amounts. That is lenders' view.

As to borrowers, at hi i they wd. want shorten terms & lesser amts, both!

✓ Upshot: demand for loans is very interest-elastic bc. lower i improves credit rating of borrowers.

Scarcity of capital in depression — the evidence is
drop of stock & land values.

Today, the drop is not apparent.

There is a tension, a time when higher i offset by
higher g , so the evidence is ambiguous. Hence the
extremity of drop when it comes.

\$ Shortage of liq. cap. in crisis, '29-32 etc.

Evidence of shortage - crisis of fin. instns.

Debts turned bad. Debtors couldn't pay.

This means terms of trade turned vs. durables used as collateral. Their service flow cd. not be liqd.

(recall Harry Sherman - long debts were defaulted, not short.)

(Then banks had no income & couldn't pay depositors. So didn't encourage new ones - paid low int.)

Gross Bus. Savings - [Deprec. + retained earnings]

1929: \$11.5b

1931: 5.2b

1932 2.7b

1933: 2.6b

L.V. Chandler, Am.'s Greatest

Depression, NY: Harper & Row, 1970.

p. 74 top. Source not given.

Drop in value of stock, bonds, r.e., also shows high i.

p. 74. Most bonds were selling way below par.

So corps. cdn't borrow. They didn't have access to easy money

Bldg. on land is not nearly a net sink of capt.

Unused ripening land is a sink. The service flow is being plowed back.

Bldg. on the land activates the s.f. Early bldg. is
i. good, releases a stream of capt. return, from the land income.

Land taxes also recover the social capt. used to develop the land.

All comply. capt. that activates existing capt. also is a source of capt.

Land cycle must affect durability.

~~into~~ Owning land lets you borrow to finance long term durable capl.

Lets you even borrow short to invest long.
Can keep rolling over short-term debt, as So. Southwest Corp. did (BW, 10-17-70, p. 46).

So when land is high, credit flows free into long projects — soon leading to cap. shortage.

Houston: boom in the heart of Texas

*Thanks to
no zoning?*

Real-estate developers in Houston galloped through the 1960s at a pace so feverish that the city always managed to rank among the country's top four for square footage under construction. But if the first five months of 1970 are any indication, the next 10 years in Texas' largest city will make the 1960s pale by comparison. Already this year, developers have announced plans for, or begun work on, a total of 8.7-million sq. ft. of office space compared with 15.2-million sq. ft. put in place during the past decade.

And those figures do not include what may become Houston's most important real-estate deal to date. Recently, Texas Eastern Transmission Corp. announced that it had nearly completed the acquisition of 75 acres of underutilized land on downtown Houston's long-dormant East Side and would develop the 32-block tract over the next 15 to 20 years at a cost estimated by others of \$1.5-billion. The land alone, roughly the size of the downtown area already developed, cost

about \$50-million. The way it will be built up will influence future planning for all of Houston, a city without a zoning ordinance, where rapid urbanization has spawned a growth pattern that local architect Thomas A. Bullock calls "completely undisciplined."

Texas Eastern's plans for its new property are not firm yet, but it has hired William L. Pereira & Associates to map the development. Pereira, a well-known architect-planner in Los Angeles, says that the project "must involve the entire metropolitan community," and that "it can't be an island in the middle of Houston; it should be a landmark in urban design." B. D. Goodrich, Texas Eastern's president, adds that the development will include "provisions for taking care of automobiles, hotels, apartments, office buildings, commercial space."

The company first acquired two small pieces of land in the eastern section of downtown in 1961, when it moved its headquarters to Houston from Shreveport, La. Then, in late

1968, it decided to conduct its own urban renewal program. To handle the acquisition, Texas Eastern hired Laguarda, Gavrel & Bolin, Inc. and Shindler/Cummins, Inc., two Houston real estate firms. Headed by George R. Bolin, a vice-president of Laguarda, Gavrel, a team of 18 brokers from the two firms contacted every property owner in the area during a three-day blitz last June. Within one week, they had agreements for 10% of the land. Now the company holds agreements for 96% of the property and expects an additional 3% to be signed in the next two

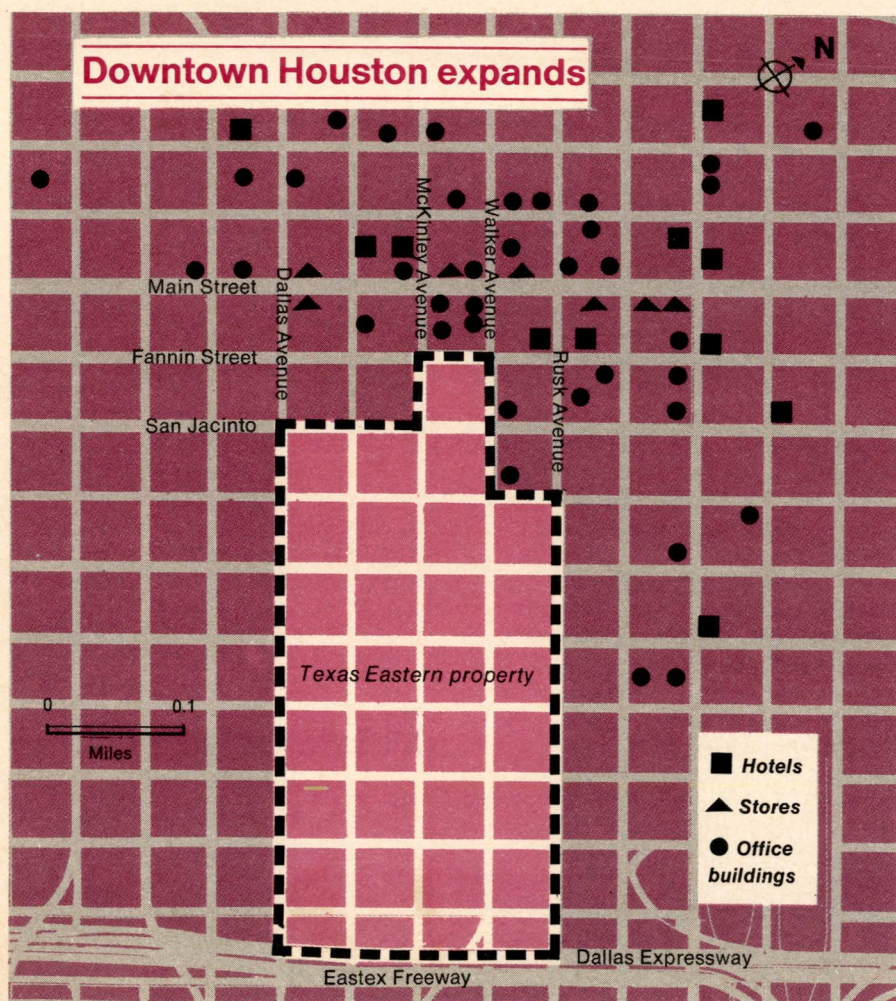
Big developers plunge ahead with plans to rebuild the central city

months or so. Two holdouts have resisted the company's overtures, Bolin says, and the project probably will have to be developed around them.

Moving in. Texas Eastern's new acquisition currently is a hodgepodge of unsightly warehouses, filling stations, parking lots, garages, cheap hotels, apartment houses, and once-beautiful old homes. Because of the area's decline, few developers have been willing to chance major investments more than a block or two east of Main Street, the major thoroughfare through the central business district. And while Bolin will not reveal the tactics he used to acquire the tract, he probably borrowed a technique from Greenway Plaza, a \$450-million suburban development about 10 mi. from downtown. At Greenway the developer offered homeowners prices 25% above appraised value of their property and will allow them to live rent-free for five years, after which they may salvage what they can and leave.

The Greenway Plaza project, begun in 1967 by Century Development Corp., reflects the direction Houston real-estate men took in the mid- and late-1960s. They emphasized areas southwest of the central business district, along the Southwest Freeway, and west of the city along Loop 610. They also concentrated on elements, such as low-level shopping centers, parks, apartment complexes, and offices, that give a city a horizontal look. The aim, says Century Development President John A. Davis, was to provide a "total environment"—all the amenities that could not be found in the central city.

New wave. But lately developers, and especially major corporations, have returned downtown with a mind to





Don't stop progress. Just make it gracefully.

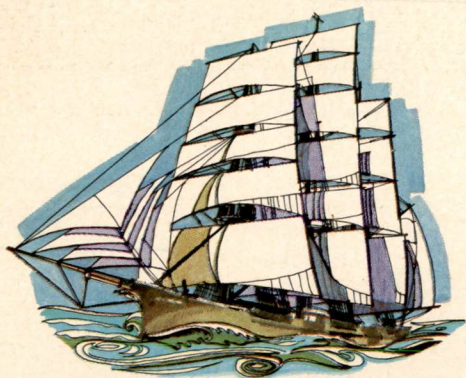
Marching across the country in the seventies and eighties, a new race of giant transmission towers will carry electrical loads of a million volts into U. S. cities. How will they look? How will the public respond? As electric utilities have often discovered, the same people who desperately need new power sources sometimes fear and oppose the needed facilities. But even a high-voltage transmission tower can be handsome, and the industry has sponsored an ambitious design program to prove it. That's where Koppers comes in. Our strong, good looking laminated wood structurals form transmission

towers like the one you see here, already built and tested for loads of 345,000 volts. Laminates can be straight, tapered, or curved, and their wood is chemically treated to resist insects and decay. Koppers is no newcomer to the electric utility industry. We supply electrostatic precipitators to control air pollution; construction materials; protective coatings; sound conditioning equipment for generating plants; chemically treated poles; reinforced plastic pole line hardware; even reinforced plastic booms for line repair hoists. We know what power companies go through. When they build, they have

to build big. The scale alone frightens some people. But maybe it will help if the giants turn out to be handsome. Koppers Company, Inc., Pittsburgh, Pa. 15219.

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and Construction**



What's a steelmaker doing with a wooden clipper ship?

This three-fourths-size replica of the famous Flying Cloud is in Bethlehem's East Boston ship repair yard. But she is not being made ready to sail the seas. Instead, she is being converted into a special annex for the Boston 1800 Restaurant, a waterfront facility of Holiday Inns, Inc.

Bethlehem Steel has been a leading designer, builder, and repairer of ships for nearly 70 years. We were the largest private builder of U. S. Navy ships during World War II. More recently, Bethlehem built both the nuclear cruiser USS Long Beach and the nuclear frigate USS Bainbridge.



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One of the fastest sailing ships in history, the original Flying Cloud was built in an East Boston shipyard in 1851. Before being destroyed by a dock-side fire in 1874, she established an all-time sailing record by racing "'round the Horn" to gold-crazy San Francisco in 89 days.



Sink of capital

The cost of a college education is up 70% since 1959.

What! You still don't own any mutual funds?

Investment Company Institute,
1775 K Street, N.W. Washington, D.C.

STATISTICS: DEPT. OF HEW—OFFICE OF EDUCATION

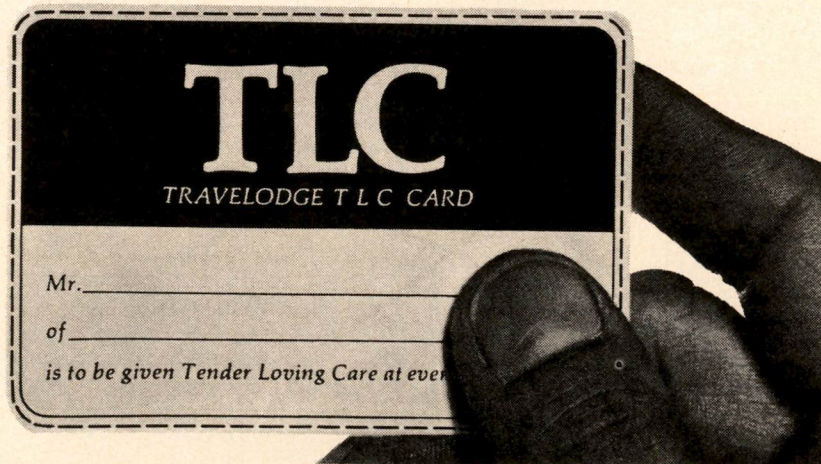
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TRAVELODGE



"humanize" it with fountains, small shops, living areas. "Our clients now are saying, 'let's save the trees,'" observes architect Bullock. "Two years ago, they couldn't have cared less." Another local architect, Joe Santa Maria, believes the Texas Eastern development, under Pereira's influence, will take this thinking a step further. "Pereira is big on doing away with the automobile," he says. "He uses people movers, mini-monorails, moving sidewalks, with garages on the fringes and mass transit inside."

Even the most optimistic Houstonians feel a mass transit system cannot be developed much before the 1980s. By that time, concentration in the central business district, spurred by the current building boom, probably would be able to support it. In addition to the Texas Eastern project, for instance, Dallas builder Trammell Crow and Metropolitan Life Insurance Co. are collaborating on an 18-acre development in the southwest corner of downtown. It will include a 34-story office tower, shops, hotels, parking.

Gerald D. Hines, a prolific developer who started building in Houston in

Texas Eastern thinks it has to do something big—to match its earnings

1957 and has completed 104 offices, apartments, and the like, accounts for another 7-million sq. ft. of space under construction. His biggest project is the city's tallest building, the 50-story, 714-ft. Shell Plaza, scheduled for occupancy this summer, and a companion 29-story building. Another building, 44-story Dresser Tower, will be completed in early 1973. It will be part of a walkway-connected complex of office buildings, hotels, and apartments called Cullen Center, on the far southwestern end of downtown.

Other downtown plans include a \$150-million three-block hotel and office project, connected by tunnels and sponsored by Tenneco, Inc. and Prudential Insurance Co.; a 40-story Zapata Norness, Inc., office building; and a 35-story building planned by Century Development.

Texas Eastern, which previously limited itself to the transportation, manufacture, and sale of oil and gas and their products, is taking its first step into Houston's red-hot real-estate market. But Goodrich, its president, points out that real estate and pipelines are similar in some ways: They require large amounts of capital, involve supervision of construction, and pay off over relatively long periods of time. His company earned \$53.4-million on revenues of \$588-million last year, and he says: "We had to do something on a scale meaningful to our earnings." ■

Sink of capl.

New Public Constr. Activity,

Year	Total Public	Federally Owned	State & Locally Owned	(3) ÷ (1)
	(1)	(2)	(3)	(4)
	\$b			
1946	2.2	.9	1.3	61
47	3.3	.8	2.5	75
50	6.9	1.6	5.2	76
55	11.7	2.8	8.9	76
60	15.9	3.6	12.2	77
65	22.1	4.0	18.0	82
69 _p	28.1	3.4	24.1	89

Ec. Rpt. of Pres., 2-10, p. 222

Cited in Ed Reuben, mimeo memo, 10-29-10.

Better check it out.

p. 139, ^{Scenicview & Laura Frankel} ~~N&HB~~ Profile of the Bldg. (Wm. N&HB, 1970)

Sink of Capl.

Land dev.	cost. <u>Mean</u> Per ft.	<u>Median</u>
'67	\$29	25
'68	-	
'69	\$36	31

Note skew. Mean > Md. Somebody is raising the ave.

Bldgs. of multi's have same ft. costs as bldgs. of singls.

If we all lived in singls on 70' lots,

$$\begin{array}{r} 36 \\ \cdot 70 \\ \hline 2520 \end{array}$$

or c. \$2500 per lot.

66 m d.u. @ 2500 = \$150,000 m = \$150b.
Huge cap. sinks in street improvements.

Add tunnels, public share, etc., maybe double that? NY RPA est. is \$20,000 per lot of infrastructure. That really blows it up.

indonesian venture/ investment seminar

New York City December 1-2, 1970
Chicago December 3-4, 1970
San Francisco December 7-8, 1970

International organizations seeking new markets, new sources of basic resources, low cost labor, new manufacturing sites, and unique investment opportunities are investigating the Republic of Indonesia. Possessing an area of 735,000 square miles (roughly the same as the U.S. East of the Mississippi), a population of 120 million industrious people, and the world's third richest reservoir of natural resources, Indonesia commands the interest of far-sighted managements.

Despite the Suharto Government's encouragement of foreign investment, many organizations encounter difficulties assessing Indonesia's true potential. The principal problem has been a lack of know-how and practical information available for management review prior to making and implementing high level decisions. To bridge this communications gap, Ness International—the pioneer U.S. electronics company in Indonesia—offers an objective, down-to-earth symposium for corporate executives and investors desiring a realistic view of Indonesian opportunities.

"Indonesian Venture/Investment Seminar," an intensive, two day meeting, features comprehensive presentations by speakers having "hands-on" experience: Indonesian and U.S. Government officials, senior representatives of international banks, members of international legal and accounting firms, and executives of Ness International. Topics to be covered include Indonesian Government Policies, legal considerations, business practices, political conditions, union and labor questions, expatriate management, logistics and communication, taxation, and an economic-social-cultural background.

The seminar fee is \$400 per person, and it includes a valuable course text and both luncheons. For complete information, write to Philip Breitmeyer, President, Ness International, 422 Waverley Street, Palo Alto, California 94301, or call (415) 322-4626.



Ness International

Smog threat over the Thames

Smog may be coming back to London. The reason: a severe shortage of smokeless coke that homeowners and industry, under government prodding and incentives, have widely substituted for banned soft coal. If the smog rolls back in, it means a setback in a model antismoke program that has impressed officials in many other cities.

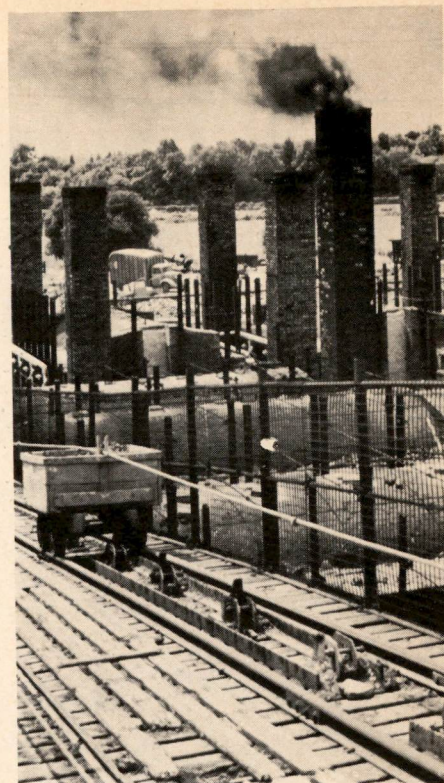
In 1952, after some 4,000 Londoners died during a week-long smog, the government took steps toward what eventually became a comprehensive program of smoke control. Government-imposed "smokeless zones" in London and other British cities reduced smoke by more than half and the once-common eye-smarting smogs became a thing of the past.

Now, the shortage of smokeless coke threatens the effort. Britain's National Coal Board, which runs the nationalized industry, estimates that coke demand this winter will outrun supply by 300,000 to 400,000 tons. As a result, authorities must relax restrictions on burning soft coal. Last week, Peter Walker, State Secretary for Environment, authorized suspension of 40% of London's smoke control regulations.

Antipollution forces are alarmed. The British National Society for Clean Air, which played a major role in smoke abatement programs, says: "We regard the situation with grave concern. This is definitely a setback."

Critical factors. The reasons for the shortage add up to what the prestigious Times calls a "muddle"—a blend of technological and bureaucratic mix-ups. Most important is the British gas industry's conversion from manufactured to natural gas. Extracting manufactured gas from coal produces coke. A decade ago, the gas industry began substituting oil for coal and then, six years ago, when large supplies of natural gas were found in the North Sea, gas users began changing over to natural gas. This has put the so-called "town gas" plants, which make gas from coal, out of business, and coke production has plummeted from nearly 10-million tons in 1960 to only 2.5-million tons this year.

The gas industry, which is also nationalized, takes little responsibility. Its job, says a spokesman, is to "provide gas, not coke." But the Clean Air Society is pressing the government to



Chimneys may belch again as London relaxes rules on the use of soft coal.

prevent the industry from closing down any more plants that manufacture gas. It also wants the government to work out a national fuel policy and, in the meantime, to redistribute coke supplies more sensibly. Right now, for example, Brighton, the seaside resort which has no smoke controls, has plenty of coke, whereas Croydon, an industrial suburb of London where soft coal is outlawed, has practically no supplies.

Also contributing to the present crisis is the failure of the National Coal Board to develop an alternative smokeless fuel. It has spent \$20-million on research in recent years and come up with "Bronowski's bullets," small briquettes of coal and dust named after scientist Jacob Bronowski, who developed them. While they work well in the laboratory, their actual use presents headaches. For example, they disintegrate easily and often fall apart during shipment. Production of the "bullets" has lagged while scientists try to solve such problems.

Meantime, in a coals-to-Newcastle flavor, anthracite briquettes are being imported from France over loud protests from Welsh miners. And would-be coke users, including government agencies, are working to switch over to natural gas or oil.

Ominously, no end to the coke shortage is in sight. Government minister Christopher Chataway warns that smokeless zones will probably have to be suspended in the 1971-72 winter as well as the upcoming one. ■

standard-size secretary.

14"

5'6"

Managing the "Money Supply"—Part I

To the question, Who manages the "money supply" in the United States? the almost universal answer would be, the Federal Reserve authorities. Technically, this widely held view is correct, and it is shared by the members of the Federal Reserve Board and others engaged in managing the Nation's banking system. The booklet entitled *The Federal Reserve System*, published by the Board of Governors, includes the following statement at the beginning of the first chapter: "The function of the Federal Reserve System is to foster a flow of credit and money that will facilitate orderly economic growth, a stable dollar, and long-run balance in our international payments."

Moreover, when the Federal Reserve System was created in 1913, Congress delegated its constitutional responsibility for coining money to the newly created independent banking system. Thus, for the past 57 years the Federal Reserve banks and the commercial banks that are members of the Federal Reserve System have been the source of "credit and money" created for use in the Nation's economy. By means of its regulatory powers over the activities of the commercial and regional Federal Reserve Banks, the Federal Reserve Board has attempted to regulate the amount of "credit and money" made available to the economy by the banking system.

The purpose of this discussion is not to question whether or not the banking system, under the direction of the Federal Reserve Board, has in fact created virtually all of the "credit and money" that have been made available. Rather, our concern is with the apparent lack of effectiveness with which the system has performed its self-stated functions, and the possible reasons why. Because developments during the decades prior to World War II now are "water long over the dam," we shall consider only the post-World War II period, with primary emphasis on the two decades since 1950.

During the 20 years from January 1950 to January 1970, there were three recessions, a "mini" recession, and the current contraction of business activity, the magnitude and duration of which remains to be seen. Thus, the Federal Reserve's efforts "to facilitate orderly economic growth" have not been highly successful. During these 20 years the Consumer Price Index increased 60 percent (the consumer dollar lost nearly 40 percent of its purchasing power). Obviously, the objective of providing a "stable dollar" has not been met. The Nation's balance of international payments was in deficit for 18 of the past 20 years, and the deficits have been a principal cause of serious international problems during much of the past decade. Clearly, management of the domestic monetary system has not facilitated "long-run balance in our international payments."

The foregoing observable results seem clearly to indicate that the monetary authorities have not succeeded in achieving their stated objectives. Our continuing research on money-credit developments during the past 35

years reveals what we believe may be some of the reasons why, in spite of their well-intentioned efforts, these authorities have failed to carry out their functions as effectively as they and others would have wished.

A technical discussion of the detailed procedures involved in managing a complex banking system is not essential to this discussion. However, a description of the relationship between the banking system and all other sectors of the economy should be useful. In an attempt to communicate effectively, we shall describe what we refer to by certain names used in this discussion.

Among their activities, commercial and Federal Reserve banks make loans and buy and sell investment-type assets such as Government, corporate, and tax-exempt bonds. Of course, savings banks, other financial institutions, businesses, and individuals also engage in lending and investing activities. However, only the commercial and Federal Reserve Banks have the privilege of paying for the securities that they purchase or providing the loans that they make by printing new currency or by merely entering a credit to the checking account of the seller or borrower. Savings banks, savings and loan associations, and other financial institutions can lend or invest only funds that have been acquired from (deposited with them by) someone else. Thus, only the Federal Reserve banks and the commercial banks can create new "purchasing media," which is our preferred name for demand deposits and currency that popularly are referred to as the "money supply." Therefore, only the commercial and Federal Reserve Banks are included in what we shall hereafter refer to as the "banking system," because only transactions between these banks and the "people," by which we refer to all individuals, businesses, and other entities in the economy outside the banking system, can result in changing the total amount of purchasing media available for use. However, the people have the option of spending or saving the purchasing media that they acquire when they sell assets to or obtain loans from the banking system.

For example, if the banking system buys a bond from Mr. Jones and pays for it by making a bookkeeping addition to Mr. Jones' checking account, the supply of purchasing media available to the people would be increased by an equal amount. However, if Mr. Jones decides to save his newly acquired purchasing media and transfers the bond sale proceeds from his checking account to his savings account, the amount of purchasing media available to the people would revert to its former level.

Broadening this individual transaction to include all of the transactions between the banking system and the people reveals that whenever the banks create purchasing media for making loans to or for purchasing investment-type assets from the people, additional purchasing media are made available to the people. On the other hand, whenever a loan is repaid to the banking system or an

investment-type asset is purchased from the people by the banking system, purchasing media are returned to it from the people. The managers of the banking system, therefore, seem to be in a position to regulate the amount of purchasing media ("money supply") in use in the economy by regulating the amount of loans made and the net amount of investment-type assets sold to or purchased from the people.

However, that this sometimes is not the situation was indicated by the example given above with reference to Mr. Jones' actions. Even if the banking system pays out \$10 billion to the people in exchange for securities purchased from and loans made to them, the people decide how much of the \$10 billion they wish to retain in their checking accounts and currency holdings and how much they wish to return to the banking system as deposits to their time (savings) accounts. If the people choose to add the entire amount to their savings accounts, the net result will be no increase in total purchasing media. On the other hand, if they choose to retain the entire amount in their checking accounts and currency holdings, total purchasing media would be expanded by \$10 billion. Consequently, the managers of the banking system can regulate the amount of lending and investing undertaken by the banks but they cannot effectively regulate changes in total purchasing media.

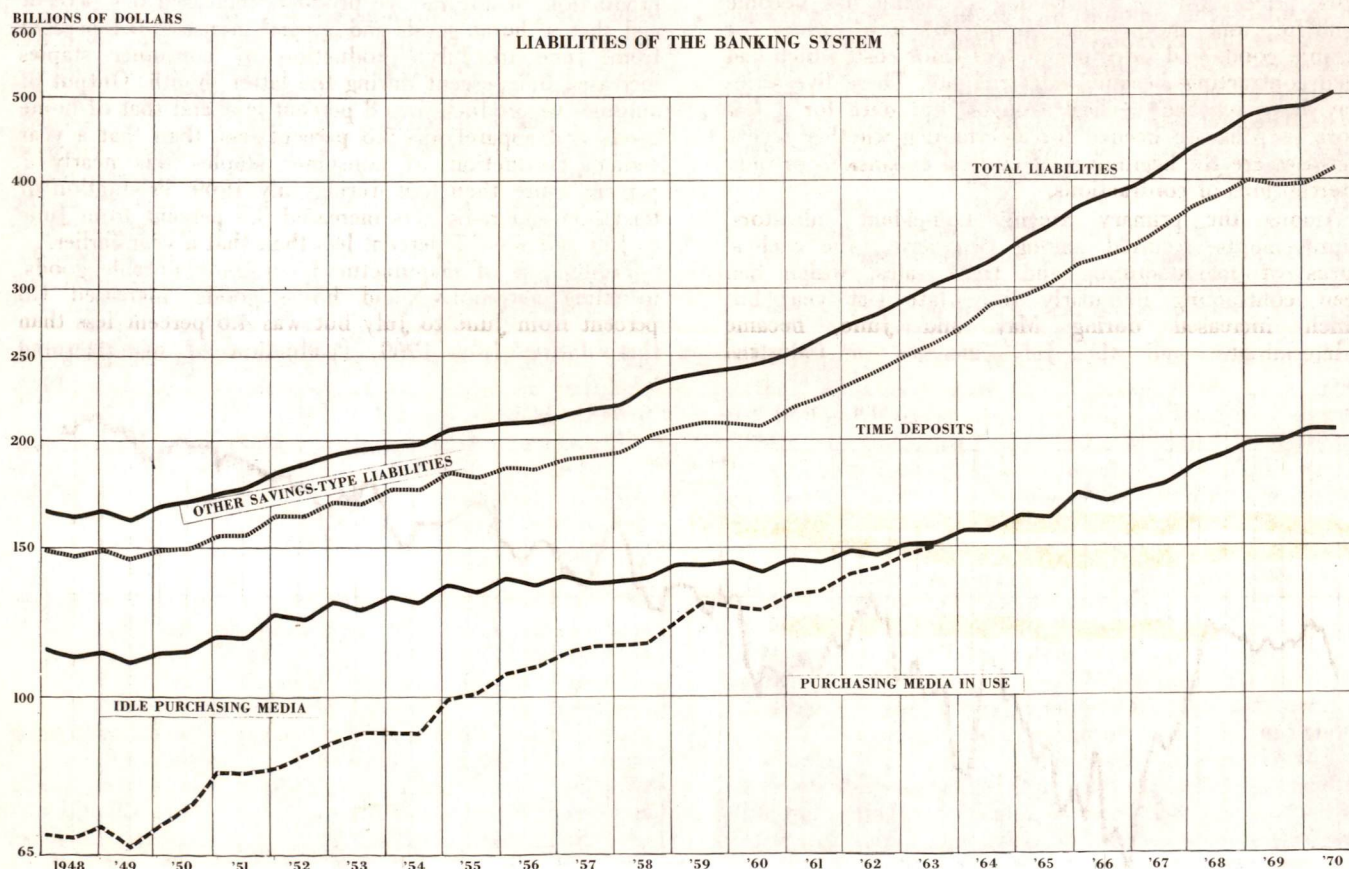
The accompanying chart reflects the experience during the past 20 years. The top line on the chart shows the changes, plotted semiannually, in the total liabilities of the banking system. These total liabilities of the banking system include all time (savings) deposits, demand deposits (checking accounts) and currency outstanding. Increases in the total liabilities of the banking system initially result in increases in the total amount of purchasing media transferred by the banks to the people.

However, as we indicated above, the people decide what portion of these purchasing media they wish to return to the banks by adding them to their time (savings) deposits, changes in which are reflected by the second line from the top on the chart, and what portion they wish to add to total purchasing media by retaining them in their demand (checking) accounts and currency holdings. Semiannual changes in the total of purchasing media are reflected by the lower solid line on the chart. The people also decide what portion of total purchasing media they wish to spend in day-to-day business transactions and what portion, if any, they wish to hoard or hold temporarily idle. The gradual return to active use of the substantial portion of total purchasing media that had been idle during and shortly after World War II is reflected by the bottom (dotted) line on the chart.

Although the rate of increase in both the total liabilities of the banking system and in total purchasing media was substantially more rapid during the decade of the 1960's than it was during the 1950's, the rate of increase in the amount of purchasing media in active use has remained relatively constant during the two decades, subject, of course, to short-term fluctuations. Thus, adoption of generally more "expansionary" monetary policies by the banking authorities during the past decade has not resulted in acceleration of the rate of increase in total purchasing media in active use.

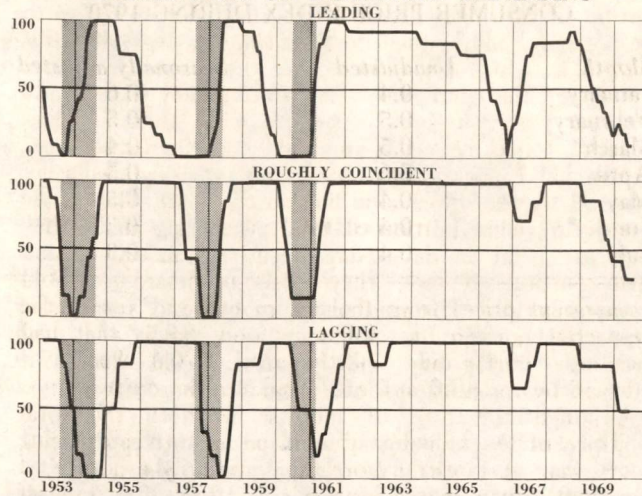
This evidence strongly suggests that the people, not the managers of the banking system, have the power effectively to regulate changes in the total of purchasing media in use.

In the next issue of these reports we shall discuss additional evidence that appears to substantiate this conclusion.



This suggests that ripe goods are declining. ~~So~~ go to standard data source, pull out something to show this.

PERCENTAGE OF INDICATORS EXPANDING



STATISTICAL INDICATORS OF CYCLICAL TRENDS

Group percentages of the primary leading, roughly coincident, and lagging indicators expanding cyclically shown on the accompanying chart reflect the "short list" of primary series selected by the National Bureau of Economic Research in 1966. Shaded areas represent periods of cyclical contraction of business activity since 1953 that have been identified to date by that organization.

The percentage of primary leading indicators expanding cyclically remained at 8, as only housing permits are definitely expanding cyclically. However, improvements recently have occurred among five other series. Whether or not the change in consumer installment debt, inverted initial claims for unemployment benefits, and common stock prices still are contracting cyclically has become doubtful; and the cyclical trends of new orders for durable goods and price per unit of labor cost, which had been contracting, became indeterminate. These five series may have reached cyclical troughs, but data for a few more months are needed for ascertaining whether recent increases are the beginnings of cyclical expansions or only interruptions of contractions.

Among the primary roughly coincident indicators, improvements occurred among two series: the cyclical status of manufacturing and trade sales, which had been contracting irregularly since late last year but which increased during May and June, became indeterminate; and the July increase in industrial

production raised doubt that this series still is contracting cyclically. Nevertheless, the percentage of primary coincident series expanding remained at 29, and this group reflected contraction of general business activity through June.

Among the primary lagging indicators, the group percentage expanding cyclically remained at 50.

Although only one of the twelve primary leading indicators definitely is expanding cyclically, as many as five other such leaders may have begun to do so. Further increases among these series would tend to support the belief that the contraction of general business activity soon will end.

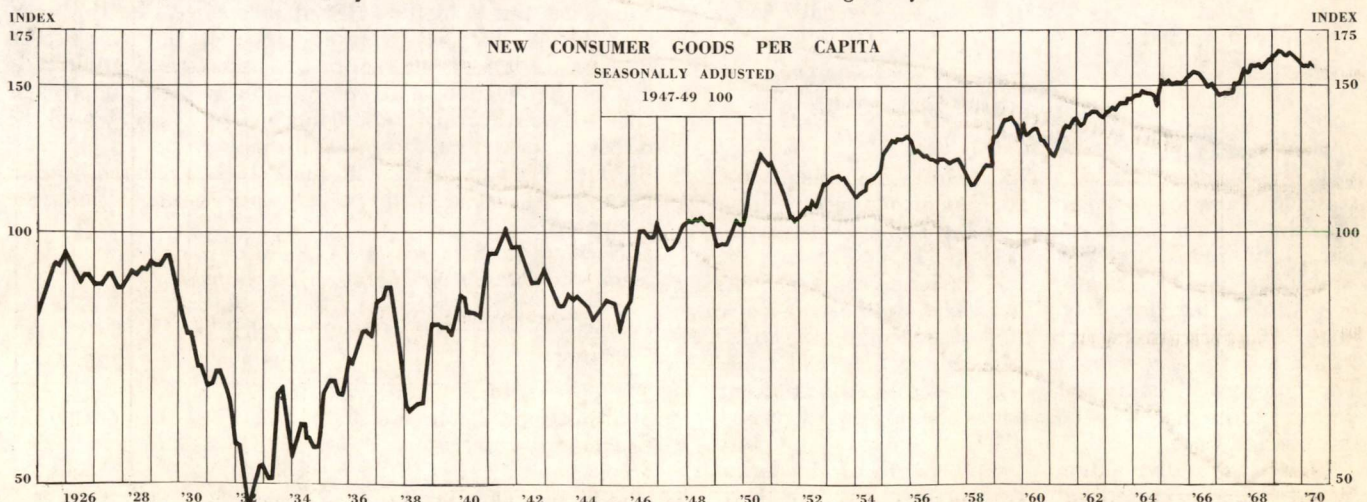
SUPPLY

NEW CONSUMER GOODS PER CAPITA

Our seasonally adjusted index of new consumer goods per capita decreased 0.7 percent from May to June and was 2.7 percent less than that during June 1969. The index in June was slightly less than the previous trough in January as a result of recent decreases in residential construction. Before adjustment for population growth, which currently is at the rate of about 1.0 percent annually, seasonally adjusted new consumer goods production decreased 0.6 percent from May to June and was 1.7 percent less than that a year earlier.

Seasonally adjusted production of manufactured consumer goods was 0.4 percent more during July than that during June but was 0.7 percent less than that during July 1969. The trend of such production has been slightly upward since last November. Manufactured consumer goods production, including durable and nondurable manufactured goods, accounts for more than three-quarters of total new consumer goods production. Among the principal categories of manufactured consumer goods, production of automotive products increased 0.4 percent and that of home goods and apparel increased 0.1 percent from June to July; production of consumer staples increased 0.5 percent during the latter month. Output of automotive products was 8 percent less, and that of home goods and apparel was 5.3 percent less, than that a year earlier. Production of consumer staples was nearly 7 percent more than that during July 1969. Production of television and radio sets increased 3.3 percent from June to July but was 17 percent less than that a year earlier.

Production of manufactured consumer durable goods, including automotive and home goods, increased 1.3 percent from June to July but was 4.6 percent less than that during July 1969. Production of manufactured



Ref. needed. Write Ed for them.

consumer nondurable goods, including apparel and staples, increased 0.1 percent from June to July and was 0.7 percent more than that during July 1969.

Data on residential construction put in place, which accounts for almost one-quarter of total new consumer goods production, are available only through June. Such construction, in terms of 1957-59 dollars, decreased a total of about 5 percent during May and June, and during the latter month it was 15 percent less than that during June last year. However, the trends of both housing permits and the number of houses started have been substantially upward since January. Therefore, increases in residential construction put in place during the next few months would not be surprising.

The cyclical trend of new consumer goods produced per capita has been indeterminate during recent months. Manufactured consumer goods production would be affected adversely by a strike of automobile workers, but increases in residential construction put in place seem probable. These factors may obscure the trend of new consumer goods produced per capita during the next few months.

INDUSTRIAL PRODUCTION

Production of steel, automobiles, electric power, and lumber (1) in the 1- and 4-week periods ended on the indicated dates in the current year and (2) in the corresponding periods of earlier years was as follows:

	1929	1932	1957	1961	1969	1970
<i>Steel</i>						
Ingots, etc.—million tons						
1 week: August 22	1.24	0.24	2.10	1.94	2.58	2.43
4 weeks: August 22	5.15	0.96	8.24	7.51	10.31	9.75
<i>Automobiles</i>						
Vehicles—thousands						
1 week: August 22	100	20	124	17	126	81p
4 weeks: August 22	389	94	475	145	250	177p
<i>Electric Power</i>						
Kilowatt-hours—billions						
1 week: August 22	1.8	1.4	12.0	15.7	30.2	32.6
4 weeks: August 22	6.9	5.7	49.0	64.0	120.8	130.5
<i>Lumber</i>						
Board feet—billions						
1 week: August 15	0.68	0.20	0.71	0.68	0.63	0.56
4 weeks: August 15	2.81	0.86	2.78	2.61	2.65	2.38

p Preliminary.

DEMAND

RETAIL SALES

Estimates of retail sales for the most recent week and 4 weeks compare with such sales during the corresponding periods a year earlier as follows:

Period	Percent Change
Week ended August 22	+ 3
Four weeks ended August 22	+ 4

PRICES

CONSUMER PRICES

The Consumer Price Index before adjustment for seasonal variation increased 0.4 percent during July, according to the latest report of the Labor Department. The July index of 278.5 (1935-39=100), which is equivalent to 135.7 on the 1957-59 base, was 6 percent more than that for July 1969. The unadjusted index increased at an annual rate of 4.8 percent during July, which was the same rate as that during May and June. The seasonally adjusted index increased 0.3 percent during July, which was the same as the downward revised increase for June.

Four of the five principal components of the index increased from June to July. Percentage changes in these

PERCENT INCREASES IN THE CONSUMER PRICE INDEX DURING 1970

Month	Unadjusted	Seasonally adjusted
January	0.4	0.6
February	0.5	0.5
March	0.5	0.4
April	0.6	0.5
May	0.4	0.5
June	0.4	0.3
July	0.4	0.3

component prices from those a month and year earlier, respectively, were as follows: food, +0.5 and +5.3; housing, +0.4 and +7.2; apparel, -0.6 but +3.6; transportation, +0.6 and +5.7; and health and recreation, +0.4 and +5.3.

The component index of food prices increased slightly more than seasonally during July, primarily as a result of an increase of nearly 15 percent in prices of eggs. Prices of meat, poultry, and fish increased less than seasonally, and vegetable prices decreased. Apparel prices decreased during July, but prices for gasoline, cigarettes, and newspapers increased. Among prices of services, increases were reported in hotel and motel rates, water and sewerage charges, and medical care.

Average weekly spendable (after tax) earnings for a factory worker with three dependents increased \$0.80 during July. This amount was \$4.90, or 4.9 percent, more than the average during June 1969. The purchasing power of such earnings in July, however, was less than that of smaller earnings a year earlier because of the relatively larger year-to-year increase in consumer prices. The purchasing power of the consumer dollar during July was only 35.9 percent of that during the 1935-39 period.

Two technical changes in the methods of reporting the Consumer Price Index have been adopted by the Labor Department. Department officials began to report the seasonally adjusted index last spring, and recently they began to carry the seasonal adjustment factor and the seasonally adjusted index to two decimal places. The reason given for the use of two decimal places was the "elimination of rounding errors" in the adjusted index, which accounted for the downward revision of the adjusted index for June.

Percent increases in both the adjusted and unadjusted Consumer Price Index this year through July are shown in the accompanying table. The table shows that the rate of increase in the adjusted index during June and July was somewhat less than the rates of increase earlier this year.

A blight that has attacked much of this year's corn crop might affect future prices of meats and poultry. If the blight restricts corn production greatly, supplies of corn-fed cattle, hogs, and chickens probably would be restricted next year. However, if many producers expect a shortage of corn feed and market their animals earlier than usual, meat and poultry prices might decrease temporarily.

Further large increases in the Consumer Price Index seem probable during the next few months.

COMMODITY PRICES

	1969	1970	
Index	Aug. 17	Aug. 10	Aug. 17
Spot-market, 22 commodities*	296	295	294
Commodity-futures	293	295	305
Steel-scrap	\$33.50	\$39.67	\$39.67

*For the preceding Tuesday.

John Kendrick of G.W.U.

— Study his background & invite to lunch.

~~Attends~~

In early 30s, i was much higher than appeared, b/c aware of falling P.

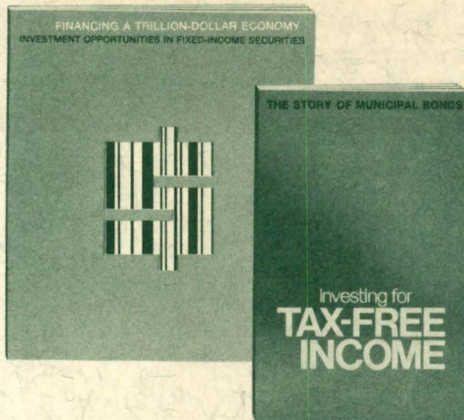
You cd. make some % just by hold'g M. But borrowers had to pay that cost plus nominal rates.

Some might conclude you cd. then lower real i by inflat'g. But this is to assume the nominal dominates the real. I believe if they antic. infln. or steady prices the cap. shortage wd. have shown up in high nominal rates.

(? low of invts. that is relevant for mass is not outstanding loans of lenders, but their turnover. Good exposition.)

Cap. shortage shows up in ways that produce deflation. Deflation then becomes the manifestation of high i. Creates illusion of low i and shortage of inv. opps.

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MOODY'S RATING	ISSUE	COUPON	MATURITY	APPROX. PRICE	YIELD TO MATURITY %	CURRENT RETURN %
A(S&P)	Delaware River Port Authority, Penna.	7¾	2010	103¾	7.45	7.47
Baa	Atlanta, Ga. Airport Revenue (Delta Airline)	8	2000	104½	7.60	7.65
NR	Project Notes of Various Public Agencies (U.S. Gov't Guaranteed)	4.93	8/6/71	100¼	4.70	4.92
NR	New York City Bond Anticipation Notes	6.40	6/11/71	100%	5.65	6.36

CORPORATE BONDS

The IOUs of American business offer buyers substantial income for a long-term span of time. A sampling of recent prices:

MOODY'S RATING	DESCRIPTION	COUPON	MATURITY	APPROX. PRICE	YIELD TO MATURITY
Aaa	Michigan Bell Telephone Co.	8½	2010	100	8.625
Aa	Scott Paper Company	8½	2000	103¾	8.50
A	Consolidated Edison Co.	8.90	2000	99½	8.95
Baa	The Signal Companies	8.85	1994	89	10.08

CONVERTIBLE SECURITIES

Convertible into common stock, these combine the features of bonds with the chance to appreciate in price along with the common. Yet when common stocks decline, the price of the bond is eventually supported by its yield. Some recent prices:

RATING	DESCRIPTION	COUPON	MATURITY	APPROX. PRICE	CURRENT YIELD	CONVERSION PREMIUM
Baa	Carrier Corporation	5½	1989	98	5.23	22%
Baa	S.S. Kresge Company	5	1995	90	5.55	28
Baa	Mallinckrodt Chemical Wks.	5¾	1995	108	5.32	22
Ba	American Broadcasting Cos.	5	1993	70	7.15	23



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Fuel stocks shrink to the danger point

In Minneapolis, companies are scrambling to get fuel oil at high prices. In Chicago, the public housing authority has tried twice without success to let a 19-million-gal. heating oil contract. And in Pittsburgh, an industrial customer is resigned to natural gas cutbacks of up to 50% some days this winter. This pattern of woe is being repeated across the Midwest and Northeast as the U. S. suddenly comes to realize that it is running short of available supplies of all the fossil fuels at once.

Fuel oil is short, natural gas is rationed, and the situation in coal is bleak

Supply and demand of industrial and home-heating oils are seriously out of whack. Soaring demand for natural gas is causing difficulties. And coal, the poor relation in the energy family until recently, is tight in supply and spiraling in price.

A shortage of one major fuel would have been bad enough. But now a whole series of diverse and often unrelated factors have combined to create a much more alarming situation. For example, U. S. population growth and efforts to control air pollution have joined forces to jack up the demand for clean-burning natural gas and low-sulfur residual fuel oil. Simultaneously, a worldwide shortage of tankers is slowing residual-oil imports and pushing prices higher.

Meanwhile, once-plentiful supplies of natural gas are now being rationed to industrial customers. Gas producers claim that government-enforced low prices have held back tapping new fields in the last few years. Now, available gas reserves are dwindling and transmission companies are hard pressed to meet demand.

The situation in coal is bleak, too. As companies and utilities have switched to fuels that cause less pollution, coal mine owners have closed marginal operations and lined up export contracts. Industrial users now are having to pay a premium for coal—if they can get it.

Home fires. The fuel oil shortage is causing special problems. While most oil jobbers say they should be able to take care of home-heating oil customers, they are not so sure about commercial accounts. "I don't expect any difficulty in supplying fuel oil for private homes," says R. J. Wohleber, president

of Oil Products Co., in Pittsburgh. But, he adds, "I don't know what some big industrial plants are going to do."

In Minneapolis, industrial oil users are already feeling the crunch. "We view the fuel oil situation as a very critical one," says Ronald Saldin, a buyer in procurement services at Honeywell, Inc. "We're in the process of trying to line up supplies for the winter, and we anticipate problems in getting supplies as well as higher prices."

Institutional fuel oil users are having an even tougher time lining up fuel oil supplies, since most of them are forced to call for annual bids on new contracts. The Chicago Housing Authority just made its third try to get bidders on a 19-million-gal. fuel oil contract and got only two bids. But it may not be able to accept either because the fuel offered has more sulfur than allowed by city ordinance and the prices are much higher than last year.

In the Northeast, utilities are having the toughest time getting fuel-oil supplies. Braintree (Mass.) Municipal Power Co., for one, limped along on day-to-day purchases until it recently snagged a 10,000 bbl.-per-day contract—but at a much higher price than it paid before.

Widespread fuel-oil shortages prompted the Associated Industries of Massachusetts, a trade group, to hire a

research concern to survey the situation. And Governor Francis Sargent of Massachusetts has named an emergency committee to help deal with fuel and electric power shortages in prospect for the state.

Burning low. Of all fuels, natural gas is perhaps in tightest supply—and demand for it is soaring because of its clean-burning qualities. "There's probably going to be a shortage," admits P. H. Robinson, a vice-president at Texas Eastern Transmission Corp., a major wholesale pipeline supplier to the East Coast. Robinson says that his company has potential customers for 20% more gas than it has available and cannot make increased supply commitments for this winter or next.

El Paso Natural Gas Co., which owns and operates a major pipeline system, will import liquefied natural gas from Algeria beginning this winter to help

For Milwaukee schools coal is now \$20 a ton. Last year it was \$14.55

close the gap in its domestic supplies. But it will have to pay up to three times more for the imports than it does for U. S. gas.

Industrial customers acknowledge that they face natural-gas cutbacks this winter. Unlike last year, they are now having a hard time finding replacement fuels. "We'll probably have to cut down to 50% of normal use once or twice," says John Fisher, a facilities engineer at Kennametal, Inc., in Latrobe, Pa. "The only thing we could do is set up an alternate system. But fuel oil is also in short supply, and propane is very expensive."

Golden glow. The situation in coal is somewhat easier, but only slightly. At Northern States Power Co. in Minneapolis, Vice-President Leo Wachter expects to meet the company's coal needs by buying added supplies in the Western states.

But a Milwaukee coal user has a different story to tell. Thomas A. Linton, business manager for Milwaukee's public schools, says that coal is the biggest problem for the system this year. "It is not a matter of shortage but of high prices," Linton says. "Coal prices are up 39% over last year." The increase means that the school system will be paying about \$20 a ton for its year's supply of 22,000 tons, compared to \$14.55 a ton last year.

While fuel shortages worsen and prices leap upward, there has been little in the way of real action by the federal government to alleviate a potential crisis. The Administration has set up a high-level committee to study the fuel situation. But it recently rejected a plan that would have allowed more crude oil imports into the U. S. ■

Fuel consumers are worried ...

'We're praying for a warm winter'

Jack Smith
Scott Paper Co., Philadelphia

'We view the industrial fuel oil situation as very critical'

Ronald Saldin
Honeywell, Inc., Minneapolis

... and so are their suppliers

'Our present policy is to turn down all new industrial business'

R. J. Wohleber
Oil Products Co., Inc., Pittsburgh

'Home fuel oil is definitely in tight supply'

Everett C. Hash
Humble Oil & Refining Co.,
Milwaukee

'The price of coal is out of sight'

Vice-president,
a Midwest gas company

'If it's a normal winter, we may be able to skin by'

P. H. Robinson
Texas Eastern Transmission Corp.,
Houston

been spent. "The individual investor has yet to be heard from," adds Robert Johnson, a partner at Paine, Webber, Jackson & Curtis.

Yet neither do many analysts think that 631 low will be tested again. Most observers reason that price breaks will simply bring in more buying power—which is just what happened last Tuesday. "There may be some flat spots in the weeks ahead," says Robert Stovall of Reynolds & Co., "but not a major selloff." Investors have probably loaded up on oil shares—a hot group recently. If analysts are on target, the next groups will be building materials, chemicals, and capital goods. ■

A hot-shot broker makes a cold exit

In the high-flying 1960s, Los Angeles broker Burt S. Kleiner was one of the most dazzling bodies to flash across the financial horizons. He catered to a fast-spending group of Hollywood investors, promoted stocks that were invariably among the most active, and put together deals that were as precarious as they were ambitious.

Now, Kleiner's arc has reached its perigee. His firm, Kleiner, Bell & Co., is in liquidation, having quit the retail brokerage business in March. It is settling accounts, and selling its remaining seat on the New York Stock Exchange. Details of the continuing dissolution came from the firm's attorney, Seymour B. Goldfeld, who said that discussion of any future activities of Kleiner and his associates was "not possible at this time."

Always highly voluble on his way to the top, the 45-year-old ex-wunderkind had no parting word for the press. However, the go-go firm apparently foundered on some of the same investments that it sold to its customers. Among the stocks that Kleiner, Bell promoted, and in which it had substantial positions at times, were Commonwealth United Corp. (which recently defaulted on its debentures), National General Corp. (down to about 14 from a 1968 high of 60), and Performance Systems, Inc., (formerly Minnie Pearl, which dropped to under \$1 this year from \$23 in 1969).

Panache. For sheer flamboyance, Kleiner was the equal of such big leaguers as Gulf & Western Industries' Charles G. Bluhdorn and 105's Bernard Cornfeld, with whom he occasionally worked. In one loan transaction that showed his flair, Commonwealth United agreed to give Gulf & Western

\$30-million worth of bonds and notes plus other equities in exchange for \$12-million in cash and a sizable share in the motion picture *Darling Lili*, produced by G&W's Paramount Pictures subsidiary. But as Commonwealth's finances deteriorated, it was compelled to make other financial arrangements



Burt Kleiner was drawing \$1-million a year until his go-go firm ran out of gas.

to pay off Gulf & Western, and it forfeited all but a tiny interest in the movie. For engineering this deal, Kleiner, Bell was purportedly paid a fee of \$500,000. According to its December, 1969, proxy statement, Commonwealth paid Kleiner, Bell a total of \$2-million for services rendered in 1968 and 1969.

While all his stocks were still going strong, Kleiner was personally drawing \$1-million a year in salary and commissions from his firm, aside from capital gains. And he spent it with gusto. He assembled a large pop art collection; he invested in an underground newspaper and a record company; he

Kleiner may salvage enough to continue the good life, if not his business

drove an Excalibur roadster; he frequented the Factory, a jet set hangout in Beverly Hills; and he owned a piece of the Seattle Supersonics basketball team.

His good life may continue, although his business may not. The word in the Los Angeles financial community is that the principals will still be able to salvage something for themselves, despite Kleiner, Bell's sharp decrease in capital in the past couple of years. Most of the free assets are believed to be blocks of restricted securities, such as letter stock, which may eventually be cashed in, although this cannot be done immediately. ■

THE PENTAGON

Blueprint for keeping the C-5A going

The Defense Dept. is close to unveiling the details of its plan for guaranteeing that hard-pressed Lockheed Aircraft Corp. can continue to produce the C-5A military cargo plane. The still-tentative plan is expected to include:

- A negotiated settlement of the dispute over some \$600-million that Lockheed claims the Pentagon owes it because of a cutback in C-5A orders from 115 to 81 planes and differences over terms of the contract. This would take the argument out of the courts. Because of huge cost overruns, Lockheed will soon be in a loss position on the C-5A with only about 20 planes built.

- A revised contract for the rest of the C-5A production run that will saddle Lockheed with a specific loss, instead of a fixed-price incentive agreement.

- Full government ownership of the Marietta (Ga.) plant where the C-5A is built. Lockheed would continue to operate the plant, but the C-5A would be isolated from the rest of the company's business. This would give the Pentagon greater control over the C-5A program.

Restrictions. The Senate this week cleared the way for settling the C-5A issue when it rejected restrictions proposed by Senator William Proxmire (D-Wis.). That amounted to approval of the Pentagon's request for a \$200-million contingency fund, already cleared by the House, to keep C-5A production going until the Lockheed dispute can be settled.

Proxmire wanted to prohibit any use of the \$200-million by Lockheed until the Armed Services Board of Contract Appeals (and a possible appeal to the courts after that) determined how much the government legally owed. This would have left Lockheed without any more government money for the C-5A for perhaps as much as two years. Lockheed has said it would stop production of the controversial plane at the end of 1970—far short of the number of planes the Air Force has ordered—if the money were not forthcoming.

The Pentagon's proposal for insuring C-5A production is expected to go to Congress in four to six weeks. But details will not be completed until Lockheed and its bankers reach agreement on additional financial support for the company's new commercial airplane project, the L-1011 airbus. Defense Dept. officials do not want civilian troubles to jeopardize Lockheed's military work, which also includes the Cheyenne helicopter (page 58). ■

He feeds capital to the computers

When the stock market was afire with speculation in 1967-68 and Wall Street was turning more daring by the minute, money men looked to venture capital as the ultimate investment return. By backing the brainstorm of some entrepreneur or stoking the expansion of a growing private company, they dreamed of amassing a fortune when the company went public.

The bear market and tight money have crimped many such heady plans. Caution now grips investors. Not only has the market for new issues slowed to a crawl, but fledgling companies have a hard time attracting new money to keep projects on track.

Morton Collins, president of Data Science Ventures, is among the many venture capitalists who are worried about their investments. "We made the original financing on the assumption that we could attract other venture money in the next stage of development," he says. "Now these sources are not there."

But Collins, a former data processing instructor at Princeton, has something going for him that other venture capitalists lack. Data Science Ventures may well be the only one of some 450 venture capital sources that devotes itself entirely to one industry—data processing. And he is using that gambit to tap new wells for his projects, including bank trust departments, many of which tend to equate venture capital with horse racing.

Shepherd. Collins founded DSV two years ago on the same strength that still enables him to attract money: Big-time investors wanted someone who could screen promising data processing ventures and keep a daily watch over their affairs. The original backers, brought together by White, Weld & Co., included the Rockefeller, Rothschild, Warburg, and Crocker families.

Of the 30 capital sources assembled for DSV, most had previously engaged in capital ventures, and some even had their own companies. Even so, says Collins, "They wanted somebody to shepherd and act as front line in assessing EDP [electronic data processing] projects." And besides their

stake in DSV, the investors often participate directly in projects with which Collins is involved. Indeed, DSV is rarely the sole backer of a company. To spread the risk, Collins is glad to join with other venture capitalists. They, in turn, are attracted by DSV's involvement in the venture.

So far, Collins has screened some 1,200 projects and made investments (ranging from \$75,000 to \$1.4 million) in twelve of them. Though a venture capital company typically has 50 to 75 investments going at once, Collins limits himself so that his five staffers can keep close watch on the companies DSV has invested in. Collins chooses his EDP experts from the academic rather than the financial world. "We are basically technical people who have learned something about business," he says. Most new EDP companies, he adds, re-



Sticking to companies in the data processing field gives Morton Collins an edge among venture capitalists.

quire business counseling because their founders are technically oriented.

In some cases, DSV gets deeply involved. At Com-Share Southern, where he was only one of several venture capitalists that took a stake, Collins won the right to undertake the main job of restructuring the company. He removed the chief executive officer, changed the name to Computer Complex, and split the company into four independent operations: time sharing, leasing, software, and hardware. At Cambridge Memories, a software manufacturer, Collins talked the president out of what he considered a premature public stock offering. DSV men visit the company weekly and, as Collins puts it, "They can smell out the customers to

see if they can pay for the goods Cambridge ships." His men also help Cambridge interview job applicants.

Search. Until six months ago, if one of DSV's projects was ready for expansion Collins had only to pick up the phone and "we'd have \$1-million in 15 minutes." The money often came from investment bankers and asset managers willing to go in directly on a company that they knew nothing about except that Collins was watching after it. Today, he says, these same sources "don't even answer the phone."

As a result, Collins started to look elsewhere for money and hit upon bank trust departments. "We figured we would have to educate them that venture capital does not involve a bunch of wild, crazy people," Collins recalls. "And we had to convince them that they were better off with us."

Some major banks, in fact, still have strong reservations. Arthur B. Mittwoch, vice-president in charge of trust investments at First National City Bank, says that venture capital investment companies are "a little way out for personal trust accounts."

Nonetheless, Collins apparently has found some bankers who feel differently. He claims to have lined up agreements from six trust departments to provide "second-round financing" for some of his projects.

One such deal is Tempo Computer, a manufacturer of mini computers. Besides financing the company's startup, Collins recently lent it \$300,000 and says he may have to seek an additional \$1-million in venture capital. About a year ago, he says, sweeping his hand toward the ceiling, "sales went bazoom." But recently, orders for time-sharing services have been stretched out. And though he thinks the "future is as bright as ever for Tempo," Collins feels he may need some money for "insurance purposes."

Squeeze. Tapping bank trust departments is one way to get "insurance." But as with all such deals these days, Collins will have to offer more for the money. He plans to set the valuation of Tempo at about \$5-million, half what it would have brought six months ago.

Even so, Collins is not all that convinced that he can raise the money. He will not identify the banks for fear that other venture capitalists will tap them before he does. Moreover, though DSV still has several million dollars to invest, it is not going into any startup ventures just now. Many well-launched EDP companies urgently need follow-up capital—and by providing it, Collins thinks he can find excellent buys at reduced risk. ■

James Freeborn: "Between natural earthquakes and legislative ones, business is difficult."

A RAND Corp. study of the Peruvian military seeks to explain this sudden swing to social concern. It cites the army's successful campaign against guerrillas, which President Velasco led, as having provided a stark look at the country's urgent needs. The traditionally conservative military officers became a progressive force for drastic change. Foreign experts have known for years that the army's Center for Higher Military Studies had been mulling over social blueprints. And in December, 1968, the regime outlined precisely what it intended to do. "We all heard it," says a lawyer, "but nobody was listening."

PAPER

The 50-50 empire that Scott built

G. Willing "Wing" Pepper, international vice-president of Scott Paper Co., is aptly nicknamed. He spends half his time flying around the world, tending to Scott's operations abroad. The half-time spent is only fair, since most of Scott's 15 overseas ventures—from Bangkok's tiny Thai-Scott Paper Co. to London's heavyweight Bowater-Scott Corp.—are 50-50 arrangements with local partners.

Scott, a Philadelphia-based giant, has favored 50-50 ventures since it first tested the international market in 1954, via a partnership with Canada's Westminster Paper Co. Emboldened by success, it pushed on into Europe, Asia, Australia, and South America where Scott toilet paper, Scotties facial tissues, and Scott paper towels are now familiar household items. So familiar that the company's overseas sales should reach \$200-million, or 27% of its projected total sales for 1970.

At times, the international group points the way to the domestic operations. Scott's vari-colored facial tissues, launched six years ago in Mexico and selling like wildfire overseas, are only now being introduced in the U.S. What's more, Scott's international earnings are offsetting a decline in domestic business. In the first half of 1970, overseas profits climbed to nearly \$3-million compared with a first-half \$1.8-million in 1969. But domestic pre-tax profits were off nearly \$6-million from last year's first-half \$52.6-million. "Every one of our affiliates makes a profit," says Pepper proudly. "That hasn't always been true, but it is now."

Like most policies, Scott's 50-50 for-



London stroll: Scott's Pepper (right) visits with Bowater-Scott's O'Brien.

mula developed by chance as much as by plan. Its Canada deal evolved as a partnership to avoid heavy taxes that could have been incurred had Scott used its stock to take over Westminster. And it was only when the Costa Rican government required local production facilities that Scott subsidized its former agent in a 50-50 deal.

As a rule, expansion-minded U.S. companies prefer to buy the extra 1% that means control. But Scott's management is convinced that 50-50 partnerships put it on the right international track. Four of its 15 overseas affiliates are still more than 50% Scott-owned, but the company is casting around for partners in these ventures.

Going native. "If you pick the right partner, you can be more successful together than alone," says Pepper. For one thing, it is diplomatic to give local outfits a piece of the action. "Consumers are the key to our success," says Pepper, "and they prefer to buy what is made by their country-men."

Pepper admits that the 50-50 policy can bring difficulties when there is no one boss "to pound the gavel." By the same token, equal authority leads to mutual trust, and it also robs competitors of the chance to hurl such charges as "U.S. economic imperialism." The value of an equal partner was proved in 1961, when Scott set up a joint venture with Japan's Sanyo Pulp Co. The

screams of competitors reached all the way to Japan's International Trade & Industry Ministry, which oversees such ventures. But relations with the ministry were handled deftly by Sanyo-Scott's top man, Yataro Ishikawa, a Japanese. "We bent, like the willow tree," he remembers with a very scrutable smile. Launched in 1963, Sanyo-Scott is now Japan's top seller of paper towels and toilet paper.

Scott is not really sacrificing a great deal when it forgoes the controlling 1%. No matter who holds control, local management must be better informed about local marketing and product needs than Philadelphia is. And so Philadelphia must rely on local management to run the day-to-day operation, with an occasional assist from

'With a good partner, you can be more successful together,' says Pepper

the peripatetic Pepper. Scott puts few Americans in its foreign affiliates, scattering only 15 U.S. citizens among its 9,000 employees overseas. Still, the company inserts Americans in some key posts abroad. Frank O'Brien, managing director of Bowater-Scott Corp. in London, is a prime case.

Buildup. Scott's array of allies includes Italy's Burgo-Scott, Spain's Gureola-Scott, Mexico's Compania Industrial de San Cristobal, and two Bowater-Scott partnerships in Denmark and Australia. The case history of London's Bowater-Scott shows how such alliances are formed and develop. When Bowater-Scott was created in 1956, Scott contributed its brand names, tissue-paper technology, product marketing knowhow, and \$1.7-million. Bowater contributed St. Andrew's Mill, a small tissue business. On the less tangible side, it also provided local financial muscle, experience with Britain's bureaucracy, and knowledge of the marketing terrain. Since 1956 the two companies have increased their investment to \$9.6-million, and plowed back all \$20-million in profits.

Besides making money, Bowater-Scott has helped end the tyranny of glassine waxed toilet paper in Britain. Scott claims that 90% of British homes now use soft toilet paper. And it can probably claim some credit for melting British reserve on the entire subject. When Bowater-Scott set up shop, toilet-paper ads were not accepted on British TV. Now they are. But Scott's victory is not total. A Bowater-Scott executive recalls that, on a transatlantic flight, he sat next to an American lady whose opening gambit was to complain about Britain's hard toilet paper. "You can't imagine a British housewife plunging into that sort of conversation," he says.

The SST: sitting duck for budget cutters

The economy's woes may yet force Nixon to block the Boeing project

With all the ceremony it has learned to stage so well, Boeing Co. was scheduled to unveil the mock-up of its 300-passenger, 1,800-mi.-an-hour supersonic transport late this week. Yet despite the glowing promises that the SST will enhance U.S. prestige, insure its technological supremacy in the world, and bolster its balance of payments, there is a chance now that the controversial aircraft may never be built.

Ironically, if the SST gets shot down, it will not be done by the environmentalists, who complain that big jet would irreparably harm climate, people's hearing, and the quality of life. The project may have to be blocked by a leading supporter, President Nixon.

What has gotten the SST into deeper difficulty than ever before are the troubles now plaguing U.S. economy and the federal budget. From forecasts of a surplus for fiscal 1971, starting July 1, the budget has swung toward a growing deficit, and the President will come under increasing pressure to slash low-priority spending. For the economizers in Congress, the SST is a sitting duck.

Last week, in fact, the \$290-million in federal money needed to keep the program going squeaked through the House by the narrowest margin since Congress began voting annual appropriations for the plane.

More perils. In coming weeks, the Senate will take up the Transportation appropriation, including the SST money. Senator William Proxmire (D-Wis.), leader of the anti-SST forces, has intensified his campaign and won converts. But the feeling on Capitol Hill is that Senators Warren Magnuson and Henry Jackson of Washington, the state where the SST will be assembled, have enough friends to see the money through. Again, the vote promises to be closer than ever before.

This is where the buck stops. Even if the Senate clears the SST money, the President will be pressed not to spend it. True, White House lobbyists put on a drive for the funds in Congress, but there is known to be sentiment within the Administration for cutting SST outlays.

That could hurt badly. With construction of two prototypes scheduled to start in fiscal 1971 and the giant General Electric engines due to go into production the same year, the program is at the point of no return. "We have no fallback position," one Transportation spokesman said last week.

Any major reduction or cutoff of funds would virtually end the program. Several subcontractors are considered worried enough to drop out in the face of any further delays.

The economy is the problem here, too. Subcontractors have a hard time carrying a large part of the financial burden during a period of incredibly tight money for a program that is still a gamble. Avco Corp. and Aerojet-General Corp. have already dropped out.

Tough stand. Boeing has a tough contract with the government, says H. W. Withington, vice president and general manager of Boeing's SST Div., and "we insist prime subcontractors take part on the same basis as we. That means cost sharing, with a tight target and with the prime subcontractors furnishing its own facilities. We are going to be real tough; that is the only way we can stay within our cost estimates."

Boeing expects to complete signing up its subcontractors by July 1. It claims the capability to "do the whole thing" in the Pacific Northwest, but it wants prime contractors to take part because that spreads the work in the industry and "helps on the financial burden."

But it is just this burden that jeopardizes the whole project. Transportation Under Secretary James M. Beggs opened the floodgates of Con-



Boeing's SST, with its needle nose (right, foreground), has reached mock-up stage, while its future is under debate.

The steel haulers' rebellion rolls on

Steel shipments began moving by truck again throughout the Midwest last week, but the end of a seven-week strike by steel haulers failed to halt their rebellion against the International Brotherhood of Teamsters.

The Fraternal Assn. of Steel Haulers (FASH), representing about 10,000 of the 20,000 Teamsters drivers who haul steel from mills, called an end to its strike as the walkout began to lose steam. Ohio FASH units had gone back to work, leadership had split, and a federal district judge in Pittsburgh had issued a restraining order against FASH interference with truck traffic on the highways.

Most importantly, perhaps, the haulers had voted nationally 3 to 1 to accept the terms of a special steel addendum to the Teamsters national master freight agreement. FASH charged that many of its members did not receive ballots for the mail ratification referendum, but the Teamsters replied that the U. S. Labor Dept., which supervised the national Teamsters contract vote, decided who got ballots.

At any rate, FASH Chairman William J. Hill, a mustached, debonair rank-and-filer thrust into leadership during a 1967 FASH strike, claimed that this year's strike had resulted in "tremendous" gains for steel drivers. Most steel haulers own their own rigs and are paid a percentage of the gross revenues for each trip. They split on a 75%-25% basis with the trucking firms that employ them. FASH, contending that the Teamsters has failed to bargain adequately on the haulers' pay and other problems, wants to disaffiliate and negotiate its own contracts.

In national trucking negotiations, however, trucking firms agreed to seek steel freight rate increases of 10% the first year and 10% over the next two years, thereby swelling the haulers' 75% portion. The first increase has already come through. Truckers, moreover, agreed to assume the \$150-a-year federal highway use tax, which the haulers have paid since 1964. Hill contends that the union would not have won these gains without the pressure of the haulers' strike. He charges that "the union bargains with us for the companies, instead of bargaining with the companies for us."

Violence. The FASH walkout, like the 1967 strike, precipitated a good deal of violence—shootings, beatings, fires,

and tire slashing. Pennsylvania state police recorded more than 500 incidents of personal injury or property damage during the strike. Seven steel companies, arguing that the owner-operators were "independent businessmen" and thus guilty of conspiracy to restrain interstate trade, sought a court order halting the strike. At one point, National Guardsmen were called out in Pennsylvania and Ohio.

All of this put pressure, finally, on the National Labor Relations Board to open hearings in Pittsburgh on FASH petitions for representation elections at hundreds of firms where steel drivers are now represented by the Team-

Owner-drivers push to leave Teamsters and bargain on their own

sters. The union and most truckers have opposed FASH's request.

The case is one of the most complicated ever heard by the NLRB, with 188 separate petitions involved in the hearings. NLRB must decide whether steel haulers have a "community of interest" apart from that of hourly-paid drivers in the same firms, and whether appropriate bargaining units could be formed of owner-operators. A decision may not come for weeks or months.

Standoff. Meanwhile, FASH goes its own way. From his Pittsburgh office, Hill now directs the activities of full-time staff people in four other cities (Gary, Philadelphia, Youngstown and Milwaukee). During the strike, FASH won "letters of recognition"—a form of informal collective bargaining rights—from 21 non-union truckers and is now negotiating a contract with one of them, Trajon Trucking, which employs 90 drivers in 13 states.

"The Teamsters don't want to organize the unorganized," Hill says, "and so we may as well do it. We're going all the way. Some day, some way, we're going to have the only union representing owner-operators, whether they haul steel or ice cream."

Hill admits that the steel haulers would have settled for separate locals within the Teamsters, like those established long ago for bread, milk, and newspaper drivers. Now, steel drivers are members of general freight locals.

Teamsters officials, however, perhaps wanting to avoid the embarrassment of negotiating with a rebel, have refused to bargain with Hill on a national basis. If the steel drivers have complaints about their union representation, union officials say, they should work through their locals.

Hill argues that these attempts have failed. In the 10,000-member Local 249 in Pittsburgh, for example, owner-operators are prohibited from holding office by the local by-laws. ■

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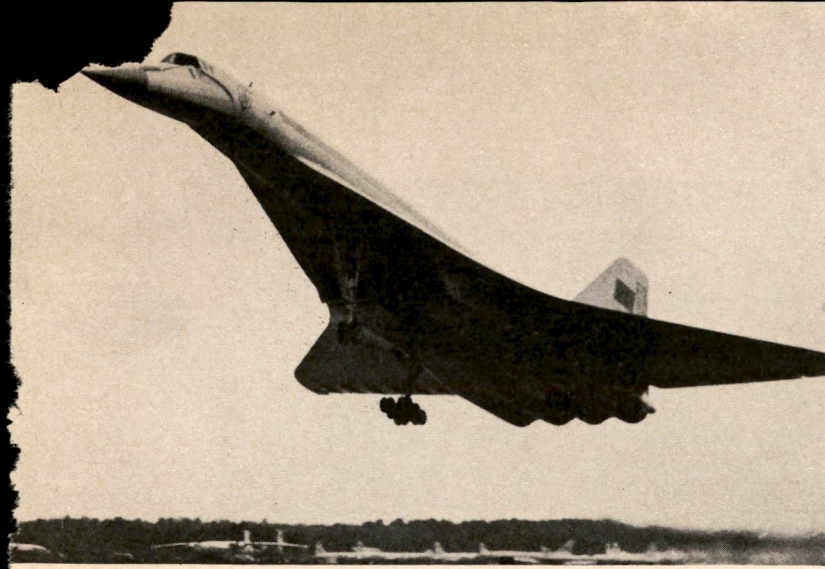
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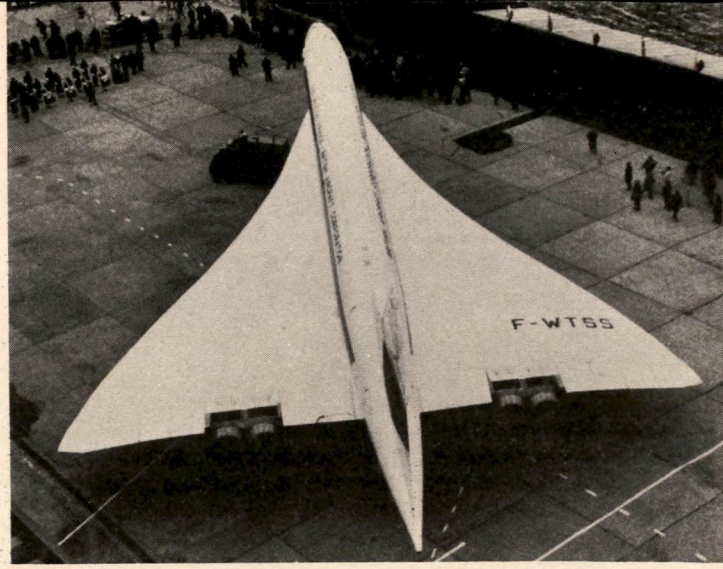
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The Tu-144, Soviet entry in the SST race, has flown at twice the speed of sound, but U. S. jet would be able to top that.



The British-French Concorde will undergo test flights this summer that could clinch orders with 16 airlines.

gressional criticism when he admitted that the government might be called upon to guarantee SST production loans after the prototype development and flight test stage. Earlier plans had been for private capital to take over at this point. But with tight money expected to persist through the 1970s, private investors might insist on the government guarantees.

This disclosure allowed critics to charge that the program will end up costing the public \$3-billion or \$4-billion rather than the \$1.3-billion the President announced last September. They say now is the time to get out, cutting losses at the \$643-million already spent, plus an estimated \$60-million to terminate the contracts.

Foreign rivals. A great deal of what does happen will turn on how the Anglo-French SST, the Concorde, performs in test flights in European skies this summer and, to a lesser extent, on how the Russian SST, the Tu-144, does on its tests. Last week, the Tu-144 flew at twice the speed of sound for the first time. Flights at this speed by the Concorde have been delayed, and it is not known when they will begin. Word filtering out of Russia is that the Tu-144's second prototype is being built with titanium, which will permit greater speeds than the aluminum Concorde, though not up to the design speeds of the Boeing SST.

So far, 16 of the world's airlines have reserved delivery positions for 74 Concorde and await hard numbers on range, payload capability, speed and fuel consumption before turning their options into firm orders. Pan American World Airways, for example, wants the Concorde to be capable of a New York-Rome nonstop flight with enough passengers to make up for operating costs exceeding those of subsonic jets. In fact, Pan Am wants the Concorde's direct operating costs to be at least as low as the Boeing 707's, though they are now estimated to be 60% to 75% higher.

The current thinking by both the British and French builders is that the Concorde will have 112 seats, all in one class with two-and-two seating. The narrowness of the Concorde fuselage will make these seats comparable to today's economy seats, but since the plane will fly twice as fast as subsonic jets, a passenger will have to sit in one only half as long. Fares are projected at 15% below today's first class and 35% above economy class.

Whether the Concorde will be profitable to operate with that seating and fare setup is a key question. So far, the reports are encouraging for the Concorde's builders. The aircraft is said to come close to "projected parameters" and is rated a growing contender for world SST sales.

Money worry. At the moment, the biggest worry for the British and French manufacturers is the current financial

Further delay could give the U. S. market to the Anglo-French Concorde

state of their clients. Some carriers could use their financial embarrassment as an excuse to cancel, or at least postpone, their decisions to buy the \$22-million Concorde. At any event, the moment of truth for the Concorde—and, to some degree, for the Boeing program—will come by September.

Even if the Concorde is not a money maker for the airlines, it could still plague the U. S. SST, so long as operating losses are not overwhelming. Mary Goldring, an editor of *The Economist* in Britain and a well-known opponent of the Concorde, has testified before a U. S. Congressional committee that London and Paris could order British Overseas Airways Corp. and Air France to buy and fly the Concorde even if the airlines' managements decided it is not profitable.

In that case, the two governments would have to give a special subsidy to BOAC and Air France to carry the SST.

"The other big airlines," said Miss Goldring, "will then be obliged to buy the Concorde because BOAC and Air France between them control too big a portion of world air capacity for the Pan Ams and TWA's of this world to allow them to have a supersonic monopoly." Thus, for a limited operating subsidy to their airlines, Britain and France could generate enough worldwide sales to recoup the Concorde's \$1.75-billion in R&D costs and possibly produce a manufacturing profit.

Squeeze on U. S. If the Concorde meets its certification date in 1973 and if the airlines feel pressures to buy it—even though it only breaks even or worse—it is bound to affect the market for American SSTs. Estimates of that market run all the way from 350 to 800 planes. But any delay in Boeing's program beyond the present 1978 certification target could dash U. S. hopes for recouping the SST investment. Under the government's contract with Boeing, royalties would be paid on each aircraft at a rate that would repay the taxpayer investment by the time the 300th plane was sold and produce a profit of \$1-billion by the 500th plane.

Another possible crimp in Boeing's plans is the Administration promise that no SST will be allowed to fly over land at boom-producing speeds. This obviously would slash the size of the market. Opponents charge that there will be pressure to lift such a ban once the plane flies. Representative Sidney Yates (D-Ill.) foresees a campaign to sell the public on the noisy plane. "They'll probably say the sonic boom is the sound of progress," he jibes.

Probably the most damaging blow to the SST advocates in recent weeks came from American Airlines director Elwood R. Quesada, who headed the Federal Aviation Administration when the SST was started. The retired Air Force general told a Congressional committee: "Many airline executives now wish the SST would go away, and I'm one of them."

Vacuuming ores from the ocean floor

Next month, a converted cargo ship will begin to suck up chunks of manganese ore from the floor of the ocean 150 mi. off Florida in 3,000 ft. of water. It will be the first trial for a technique that could make deep-sea mining a going business by 1975.

The developer is Deepsea Ventures, Inc., a subsidiary of Tenneco, Inc. A number of other U.S. companies are studying methods of recovering and processing ore from the ocean, though most of them are closemouthed about their plans. Such giants as Kennecott, International Nickel, U.S. Steel, Bethlehem Steel, and Union Carbide, reportedly are interested in tapping these rich ore beds.

Deepsea Ventures, which believes it has a head start, estimates that it would take \$100-million to \$200-million to set up a commercial mining and processing operation. It hopes that the tests over the Atlantic Ocean's Blake Plateau will be favorable enough to lure a consortium willing to invest that kind of money.

Any such consortium would have to face up to two big questions:

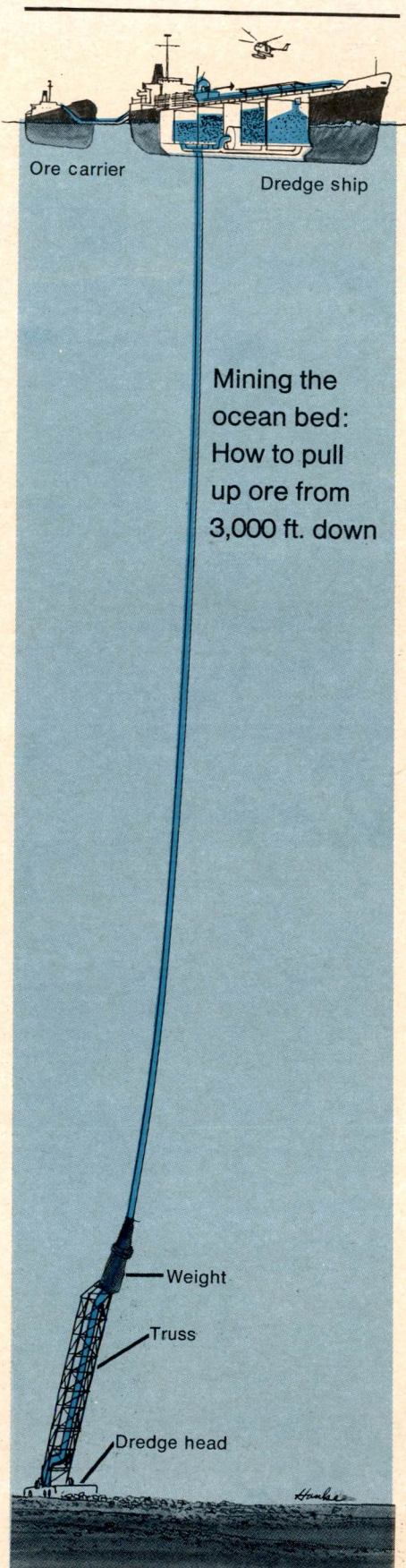
- Will a method that works in water half a mile deep work in two or three miles of water, where some of the richest deposits apparently lie?

- Who has rights to the sea bottom? A United Nations committee will take up the matter again in August, and President Nixon two weeks ago said the U.S. will press for international control.

Growing need. Undersea mining at much shallower depths is done in several corners of the world. Among the oil platforms in the Gulf of Mexico are two full-fledged sulfur mines. Alaskan waters yield lode barite. Magnetite is pulled from Japanese waters, and tin is mined off the shores of Indonesia and Thailand. This spring, a company began to strip away ocean bottom in the Bahamas to get aragonite.

Such operations use simple extensions of land-mining technology. This limits them to depths of less than 600 ft., and many of them are in water no deeper than 100 ft. Mining at the depths contemplated by Deepsea Ventures is generally considered to be a good many years away. But interest in ocean mining—shallow and deep—is growing. Industry and government leaders around the world are concerned over the dwindling reserves of essential minerals on land.

What makes the ocean deeps so attractive to Deepsea Ventures and oth-



ers is one of nature's freaks: the presence on the ocean floor of manganese-rich lumps, or "nodules." Scattered about like so many eggs waiting to be gathered, the nodules seem potentially to be a new, competitive source of manganese, a key alloying element in steel that the U.S. now buys chiefly from Brazil, Gabon, and Australia. But the nodules also contain other useful metals, some of them in short supply worldwide.

No one knows for certain how the nodules came to be, but John E. Flipse, president of Deepsea Ventures, thinks they were formed by an electrochemical process. They evolved in parts of the ocean where the water was clean, he says, and where its acidity and electrolytic potential happened to be just right. Ions of metal normally found dissolved in sea water began to precipitate out on some tiny nucleus—perhaps a grain of sand or a shark's tooth. Years and years of building on such tiny starts produced nodules that sometimes measure a foot across.

Strategic metals. Judging by samples that Deepsea Ventures has recovered from the Pacific Ocean, the manganese content of ocean-floor nodules ranges from only 25% to 35%, compared with 46% to 50% in the ores mined on land today. Their redeeming virtue is the metals that come along with the manganese: nickel (1% to 1.8%), cobalt (0.3% to 1.5%), and copper (1% to 1.6%). Nickel and cobalt are strategic metals

Much depends on how concentrated the nodule deposits are

often in short supply. And that low copper percentage is high compared with the 0.7% average in copper ores being mined today.

To make deep-sea mining pay, Flipse says, a company would have to bring up 1-million tons of raw ore a year. At that rate, a nodule-mining operation would meet about one-quarter of the current U.S. demand for manganese (last year's imports: about 2-million tons). It would also be producing 1% of the copper, 10% of the nickel, and 40% of the cobalt now used by the U.S.

The market impact would vary. The nickel and copper could be absorbed easily, says Flipse. And while the Bureau of Mines says there is no anticipated shortage of manganese, Flipse is confident that the added supply could be absorbed worldwide. Cobalt could be more troublesome, as the Congo is

Prorating, & capl. shortage. -- incompleteness

If lenders respond to tight money by prorating, this may worsen shortage by adding longevity. Bldrs. put dead money into funds. for future expansion. Instead of cutting out longevity, they cut out ~~things~~ ~~new~~ fast-moving parts.

Bldrs. wd. do this if they think tightness is temporary. — i.e. they forecast lower i .

Case of Explan. Arts Bldg., N.Y., tight m. made them bld. structural support work for another 5 floors, future floors.

Where did bearishness go wrong
re suburban land mket?

1. Underest. inc. tax privileges & their value.
2. Spread of low density zoning, effective tool of supply restraint; and control of prop. tax amounts.
3. Great p.w. spending, paid for by non-prop. taxes.
4. A pref. for land w. rising incomes.
5. Higher emphasis on schooling, keeping demand pushing outwards.
6. General inflation.
7. Fiscal-monetary stability, short run.

the transitions between positions. Let us here at least try to sketch some dynamic phenomena, without which the statics are not always plausible. Two transitional factors worth emphasizing are changes of land prices, and capital flows.

Urban expansion may tend to lower average unit prices of urban land, but as noted before, it raises prices of newly urbanized lands. The rising of price evokes opposite responses from different groups. It causes some speculators to sit on idle land for years. But it draws a positive response from some builders, to whom land is just another raw material which they turn over nearly as fast as the other materials in a house. The prospect that materials will appreciate in one's hands is a lucrative adjunct and a stimulus to any business. It is, however, a speculative stimulus which forces growth rather than just facilitate it. Without formal proof, it seems likely that it overstimulates building and commits more capital to this durable form than would be optimal.

Thus rising land prices both stimulate overbuilding and broadcast it over areas much wider than those actually built on. New transportation-utility networks are required for both the new buildings and thereby, unavoidably, for the empty spaces between. Thus the rising land prices that attend supersession of land uses tend doubly to retard the replacement frequency of capital.

Capital requirements are very high, which is another way of saying there are abundant investment opportunities in urban expansion. Overpricing of land has been accused of choking off investment opportunities, but overpricing of the best lands creates other sorts of opportunities for the development of substitute lands. The problem, it seems to me, is

not that investment opportunities simply disappear, but that they move farther and farther away from the ultimate consumer, requiring more capital than society can muster. If we increase the capital requirements of production, then production cannot increase as fast as we create new capital.¹

It is also unavoidable that some day the overpriced land will seek a market. Then the problem becomes not finding investment outlets, but finding capital to improve all that land, and finding demand for its services. There is a certain contradiction in an economy's undertaking concurrently to spread its capital over more land, and to retard its turnover. The danger is that we start more than we can finish.

Whence comes the capital for territorial expansion? Net new capital formation supplies some, but, directly or indirectly, a large share must come from recovery of capital from older buildings elsewhere. These yield up a surplus because old sites are not renewed as buildings depreciate.

In the early years of a land cycle, peripheral growth areas typically import capital from older areas. Among other effects, that capital flow tips the terms of trade in favor of the growth area -- a familiar principle of international finance. It tends thereby to generate expectations in the growth area more favorable than can be sustained, and virtually guarantees that some of the oversanguine investments of the growth period will never be turned over, but languish pending in perpetuity.

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¹ Harrod's assumption of a fixed "Relation" between capital and output thus assumes away this sort of barrier to growth, and disqualifies his theory from shedding much light on some of the key issues in economic growth.

The growing fringe of an expanding economy does not feed on the country, like a grass fire. It draws its sustenance from the older center. But as it sucks the center dry, the center begins to demand capital too, for renewal. That worsens the terms of trade of growth areas, presaging trouble recovering all the capital committed there. It adds to the already excessive capital requirements imposed by disorderly expansion.

Thus the demand for disposable capital rises high. Now, what of supply? Supply does not run dry simply because the older buildings are exhausted of value. Their value has been stored up in newer buildings of the earlier boom, which buildings are now themselves yielding up their value for reinvestment. There may be some "echo effect" from irregular amortization patterns inherited from earlier booms. There is probably a slowdown of capital recoveries because investments of the early boom were too slow-turning -- that we have already mentioned. Now let us sketch out the effects of a dynamic factor, the rise of land prices, which as much as any influence is responsible for a shortfall of capital supply.

When, as a building depreciates, the land under it appreciates an equal amount, the owner is spared any need to reinvest the proceeds to maintain his assets. He may regard as net income everything the building yields to him. If he wanted to make two steps of it he could deduct depreciation and then add the land increment, but it would come to the same thing. Thus the rise of land prices destroys capital.

But how is it that land prices rise if, as I allege, we are developing excess land-capacity? There are several causes, and in their analysis we can identify another way that rising land prices destroy capital.

I have mentioned supersession: specific lands shift to higher uses. Another cause is the speculative fever, which defies rational analysis but is an observable and substantial factor in boom land markets. A third cause is the increase of optimal area of land units, which pushes the marginal value of land for expansion up above the whole-unit value.

A fourth cause, of especial interest here, I will call the concentric ring effect. There is not just one front of territorial expansion, neatly defined. There are as many fronts as there are different intensities of land use, and many of them are hard to find because of the intermingling of land uses. Now as developmental works expand, and land loses scarcity in its present use, it often gains the prospect of higher use.

Say we bring on the market more land for citrus. That devalues old citrus land -- for citrus. Meantime a city is expanding, however, and residential value supersedes citrus value, at least over some areas. Residential expansion tends to devalue old residential land -- for residences. Meantime commerce is expanding, however, and freeways and industry and schools and institutions, and those values supersede residential value in many areas. And so on.

Even if type of use does not change radically, any rise of land prices imposes some locational obsolescence on buildings. Residences that were appropriate to \$500 lots will become \$7,000 ones, even if they are the same lots.

How does locational obsolescence destroy capital? Let us revert, for the movement, from true dynamics to comparative statics. If the value of land in its best future use -- its "expectation value," as the foresters say -- if that value rises while the value of the present

land-building package does not, the value of the building is impaired. It is pirated, so to speak, by the land.

The effect of that on capital recovery is evident if we suppose land expectation value to have risen to equal the present land-building package value, so that nothing but a little inertia delays demolition. Then all the yields of the building are net income. There is no depreciation. The owner can consume it all without a qualm.

That is the extreme case, to illustrate the point. In general, land expectation value rises to pirate away only part of the building value. The part so pirated ceases to depreciate. Its gross yield becomes net income.

✓ This effect is not dynamic. It is not due to rising land prices. It is due to their having risen. It is in addition to the dynamic movement in its effect.

The effect of each is to destroy capital. The gross yields from buildings, orchards, and other improvements fixed to land, that might have been reinvested to meet the demand for capital, become largely income and are consumed.

The effect of high land values is not entirely bad. High land values generally tend to promote quicker-turning new investments, and the high land values of the late boom do that. But the timing is unfortunate. High land values promote not just fast capital, but lots of it -- more per acre. Coming as they do at a time of worsening capital shortage, they aggravate the problem and help to bring it to a crisis before their faster return of capital can be much help.

If high rents and land prices could be sustained they could serve a very constructive role, inciting owners to apply capital heavily and frequently. But land prices cannot, under conditions as described, be sustained. There is not enough capital to finish improving all the land as soon and as intensively as would be appropriate to the high prices.

With much capital destroyed, and much other capital frozen or viscous in half-finished land developments, expansion must finally grind to a halt from shortage of disposable capital. The lyrics of "How the heck can you work when there's no work to do" are heard again in the land.

The role of land prices in the sequence has been in several ways to expand demands for disposable capital, but to contract the supply by indisposing or freezing some capital, and pirating and destroying other. Now, as the resulting shortage of disposable capital brings a crisis of high interest rates, land values must pay the penalty for their mischief. High interest rates erode land prices both by lowering the share of gross income imputable to land, and raising the rate at which the rent is capitalized. Land values also suffer from higher local taxes, as municipalities struggle to meet the high commitments assumed in the earlier flush of growth. Land values suffer from depressed expectations, as financing of promised developmental works grows harder, and voters revive the habit of rejecting bond issues.

✓ The prospect of falling land prices is as depressing to builders as the earlier rise was stimulating, and that, coupled with tight capital, chokes off building. Asking prices tend to lag behind bids in such times, and a long period of attrition set in with few transfers. The fall of land collateral staggers financial institutions, and the stage is set for a cumulative downspin.

✓ The downspin may be aggravated or meliorated by the handling of monetary and fiscal policy, but monetary machinations alone cannot thaw out frozen capital. We can make money, and make money turn, yes, but merely turning money does not turn real capital. We can use the fiscal and monetary powers of government to force the creation of new circulating capital, and that would speed recovery. But in the main we must let the passage of time free the bulk of our capital, and pray we do not then use it to build pyramids.

✓ I will not say that new land development does not for a time employ labor. It is better than complete stagnation. Once in a generation or so, to pick up our capital from one place and lay it down somewhere else does employ labor. But how much better it would be to move it enough quicker, and more regularly, to afford steady employment at higher wages.

iv. Replacement frequency and the acceleration principle
of J. M. Clark

The unstabilizing effect of change in growth rate is directly proportional to the durability of a capital stock. If we are replacing 5% of our houses yearly, and adding 1%, then growth is $1/6$ of housing production and can halve or double without cataclysmic effects on the whole. But if we are replacing 1% and adding 1%, then growth is half the whole, and changes in growth rate are seriously unstabilizing.

That is, I believe, the simple essence of what is called the acceleration principle. Certainly it was what J. M. Clark stressed in his original article on the principle. Some later expositors seem to have gotten away

from the main point,¹ so I refer to it as Clark's acceleration principle. The bearing of the principle on our subject is so obvious I will merely call attention to it: a low replacement frequency of capital, along with its other drawbacks, aggravates the problem of economic instability.

v. Territorial expansion and adoption of innovations

✓ If expansion does not help employment directly, it does accelerate adoption of new techniques and so forestall stagnation, so the argument goes. But it seems to me quite obvious that that which slows capital replacement is no friend of innovation.

We hear many theories these days about how to transform primitive cultures into modern, and much worry about modernizing our own capital. The goals would be much more attainable, it seems to me, with an advanced turnover tempo. Every time capital is replaced it can be completely transformed, but if it lasts 80 years it cannot be the least altered during the period. Quick change of capital is not a sufficient condition for speedy innovation, but none is more necessary. Given the other conditions, one might almost say that the rate of adoption of innovations is a simple direct function of the rate of replacement.

Far be it for me to deny the important truths of the Turner thesis. The venturesome frontiersman, freed from binding traditions and stultifying prejudices, goes back to direct observation of Nature and adopts innovations before his book-blinded Eastern cousins. My plea is that we

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¹ It is common for them to emphasize a sort of "crack-the-whip" principle, where small percentage changes in "consumer goods industries" bring large changes in the "capital goods industries." The distinction is suggestive, but too vague. Durability is the essence, and durable consumer goods, like houses and seaside resorts, are much more subject to acceleration gyrations than are soft capital goods like feed grains or potter's clay.

modify our institutions (and perhaps even our books!) so that those pioneers need not turn away from the rest of us in order to innovate. For in removing themselves they also remove more than their aliquot share of our capital, and retard its future turning tempo. Thus, while pioneering seems to be associated with mobility and change, and while it is, as I have mentioned, an improvement over sedentary stagnation, it retards the evolution of capital by lengthening the period between generations, and renders the economy less progressive, less adaptable, more ponderous, more clumsy, more sprawling, and more vulnerable to any nimble competitor in peace or war.

6
III. A glimpse at the dynamics of territorial expansion.

We have been treating a dynamic situation in terms that might be described as comparative statics. That is necessary in a brief survey, in which we cannot begin to do justice to the dynamics of the subject,

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¹ Wicksell, who used this kind of terminology earlier, also used 'height' to represent prolongation, and horizontal length to represent volume. The analogy is confusing, I think, and not at all mnemonic. I much prefer to describe the temporal aspect in temporal terms like frequency, tempo, etc.

There is a lead-time requirement in most capital spending plans.

When capl. gets short, i rises. Many programs in result are stretched out, because the capital to complete them is not available.

But that further slows the recovery of the capital already sunk -- including complementary capital in related projects.

Thus a capl. shortage may worsen a capl. shortage, since it takes capl. to liquidate capl.

There is a watershed divide somewhere, producing a crisis. Beyond the divide, a shortage cumulates. Inside the divide, it equilibrates -- i.e. the high i rescues capl. and the shortage is met.

How to spot the watershed? We have had several crises since '46 when i rose and dropped back again.

Half of bldrs. are also land developers.

This suggests a bldr. is in better spot to gain from apprem. than most; so apprem. helps force. bldg.

Adds to instability.

after December 29, 1969, when they reached 7.13% (Chart). By the end of February the market yield on U.S. Government Bonds, (10 years due or callable) dropped 91 basis points to 6.22%. But after about a month of fluctuation at about that level, yields started to increase



BUILDERS' ECONOMIC COUNCIL REPORTS ON OPERATIONS, LABOR RATES, PARTICIPATION IN GOVERNMENTAL PROGRAMS

The twenty-fourth survey of the Builders Economic Council of the National Association of Home Builders was completed recently. Nearly 40% of the 675 members of the Council responded.

BEC members are selected by their local associations as being representative of their market. They are, however, generally more active in local associations and more progressive in their building operations. Their own operations may not be always typical, but since they have a thorough understanding of the local market, their observations are useful in identifying trends of the industry.

BUILDING OPERATIONS

In 1969 nine out of ten builders had other business interests in addition to residential construction. Over 40% of the BEC builders were involved in land development last year. Over 20% were involved in real estate brokerage, remodeling and/or commercial industrial construction. The remaining builders were involved in various other operations in addition to building homes.

In 1970 some change is noted. The percentage involved in land development dropped to 31%. The total number in real estate, remodeling and/or commercial industrial in-

again, getting to a new alltime high of 7.34% on May 26, 1970. Since then, yields began a slide down and at the end of June were at 6.86%, down 48 basis points from the May high, and 27 basis points below December's high.

The slow reaction of long term rates could be attributed to difficulties in convincing investors and the general public that the fight against inflation has been going well. Until this is done, the long term rates may not drop as much as short term rates. Some easing, however, will undoubtedly occur.

One such area very likely will be in the mortgage markets. The more relaxed mood in the money markets and a substantial improvement in the flow of funds make it imperative that loan officers look for investments in mortgages. In this way they may well begin to force a further slow decline in long term rates.

That an easing in the supply of available funds is starting to have some effect is clear from the increased mortgage loan commitments and the easing in the FNMA auction market offerings. This trend, it appears, will continue for the balance of the year.

creased to 27%. Also builders have become more active in rehabilitation, medical-religious buildings, mobile home parks, component manufacturing and lumber materials dealer operations. Some of these wider diversifications on the part of BEC builders is attributable to the fact that the depressed housing market has forced many to seek other sources of revenue.

BUSINESS ACTIVITIES OF BUILDERS IN ADDITION TO RESIDENTIAL CONSTRUCTION

Item	1969	1970
Land Development	43%	31%
Remodeling	6	9
Rehabilitation	—	2
Commercial/Industrial	6	7
Educational	—	—
Medical/Religious	—	1
Recreational/Public Building	1	1
Streets/Highways/Bridges	—	—
Utilities	—	—
Mobile Home Parks	—	4
Mobile Home Manufacturing	—	—
Component Manufacturing	—	1
Home Manufacturing	1	1
Architect/Engineer/Planner	1	1
Financial Institution	—	—
Insurance/Title Company	1	1
Lumber/Materials Dealer	3	4
Mortgage Banking	1	1
Real Estate Broker	9	11
Subcontractor	1	1
Vacation Home	2	1
Other	15	11
No Answer	10	12
	100%	100%

ECONOMIC NEWS NOTES and HOUSING STARTS BULLETIN are available by subscription for \$50.00 a year from:

Economics Department
National Association of Home Builders
1625 L Street, N.W.
Washington, D.C. 20036

July, 1970

RESIDENTIAL CONSTRUCTION LABOR — WAGE INCREASES

The BEC builders reported that the average wage increase experienced among the residential construction building trades in their area was 10%. However, the actual wage increases reported varied widely. Seventeen percent of the builders reported wage increases of over 14% and 26% of the builders reported increases between 10% and 14%. In general, the raises were the same for all crafts. It must be pointed out that residential construction employs relatively fewer trade union members than other aspects of construction. Therefore, the amount of wage increases usually varies widely from area to area. According to the 1969 NAHB Membership Survey, less than 20% of the builders reported having all worker union members.

CONSTRUCTION TRADES Average Wage Increase May 1969 to May 1970

<u>Craft</u>	<u>Average Percent Increase</u>
All Crafts	10.0%
Carpenters	10.0
Bricklayers	10.2
Cement Masons	10.0
Electricians	10.2
Painters	9.5
Equipment Operators	10.2
Laborers	10.0
Truck Drivers	10.0

CONSTRUCTION LABOR SUPPLY

Similarly, the supply of labor varies widely between areas. One-third of the BEC builders reported that most trades workers are scarce, the greatest need appears to be in carpenters, bricklayers, and cement masons. Workers in least demand are truckdrivers. This is basically the same situation that existed in 1966, the last time this question was asked in a BEC Survey.

RELATIVE SUPPLY OF LABOR May, 1970 Percent of BEC Builders Responding

<u>Craft</u>	<u>Oversupply</u>	<u>Adequate</u>	<u>Shortage</u>
Carpenters	9%	44%	47%
Bricklayers	4	54	42
Cement Masons	3	58	39
Electricians	5	68	27
Painters	5	64	31
Equipment Operators	5	67	28
Laborers	9	58	33
Truck Drivers	7	73	20
Composite Total	6%	61%	33%

LOW INCOME AND INNER-CITY CONSTRUCTION

For the first time several questions were asked of the BEC members about their participation in governmental programs. The 251 respondents answered them as follows:

Are you planning to build or are you currently building low income housing?

Yes	45%
No	48%
No Answer	7%
	100%

The degree of participation varies widely among home-builders. However, the average number of units being built under the government programs is expected to increase from 24 units in 1969 to 85 units in 1970, an increase of over three times.

Under which of the following government programs are you building?

<u>Governmental Programs</u>	<u>Percent of All Units</u>	
	<u>Units 1969</u>	<u>Expected Units 1970</u>
235 Home Ownership for lower income families	42%	42%
Public Housing Turnkey II for sale	26	23
221 (d) (2) Home Mortgage Insurance, Low & Moderate Income	17	3
236 Rental & Cooperative Housing for Lower Income Families	6	25
221 (d) (3) Rent Supplement Market Rate	5	6
203 (i) Home Mortgage Insurance for Outlying Area Properties	4	1
	100%	100%

All BEC builders, whether they are participating in the government low income and inner-city construction programs or not, agree that major impediments to these programs exist in their areas. They also seem to agree on which are the most important. The only difference between the participating and non-participating builders view of these problems is that those builders who are involved in the programs have decided to become involved despite the problems.

What are the major impediments to build low-income housing in your area?

<u>Impediment</u>	<u>Percent Respondents</u>		
	<u>Participating Builders</u>	<u>Non-Partic. Builders</u>	<u>All Builders</u>
Land Cost	60%	61%	61%
In-Adequate Allocation of Funds	60	29	43
Zoning	40	43	40
Too Little Profit	42	32	37
Red Tape	34	38	36
Codes	23	22	22
No Special Assistance	10	8	9
Other	11	6	9
Time	5%	8%	7%

Profits falloff loses speed

The midyear profits reports of U.S. business seemed to be making much the same point this week that midyear gross national product figures made a couple of weeks ago: The second three months of 1970 were not quite as dismal as the first three months of the year.

This year's second quarter was bad enough, of course. Ford Motor Co. reported second-quarter profits down 8% from the same period in 1969, while at Chrysler Corp. the dip was 80%. Du Pont, biggest of the chemical companies, reported a 6% decline. Second-quarter profits were off by 10% for Standard Oil of New Jersey, by 25% for U.S. Steel, and by 45% for RCA. General Motors, the biggest corporation of all, earned \$473-million in the quarter, up 5% from a year earlier. But in that quarter last year GM's earnings were held down by labor strife.

In fact, the second-quarter figures for U.S. business look good only when compared with the first-quarter earnings. Net corporate profits dipped by 10% in the first quarter to a \$44.6-billion seasonally adjusted annual rate. The dip in the second quarter probably was not that steep.

The Commerce Dept.'s official second-quarter figures will not be out for a month or so. A BUSINESS WEEK study of the earnings of 350 manufacturing companies, though, shows net earnings for the lot at \$4.3-billion, down 6% from the same period a year ago. The 350 reported second-quarter sales up 3.7% and profit margins (net income per dollar of sales) down to 5.5%, against 6.1% in the second quarter of 1969.

The BUSINESS WEEK figures are not adjusted for seasonal factors; the Commerce figures will be. The BUSINESS WEEK study, moreover, covers only manufacturing concerns—mostly the larger ones.

Improvement. If the study is on target, then U.S. corporations earned money, after taxes, at around a \$46-billion annual rate in the second quarter—down, of course, from the \$49.7-billion rate of the second quarter of last year, but up from that \$44.6-billion rate in this year's first quarter.

Only a handful of industries were able to fatten their earnings in the second quarter. Copper prices have been holding firm, and that pushed earnings of the nonferrous metals companies up by 19% over a year earlier. Kennecott

Copper reported a 56% gain in the second quarter, and American Smelting & Refining a 26% gain.

The food and beverage group shows a sharp gain, but a good deal of that comes from Anheuser-Busch bounding back from a strike-torn second quarter in 1969. Even so, most of the big food companies—Kraftco, Kellogg, CPC International—all earned more this time than in the second quarter of 1969. The conglomerates as a group were ahead of their 1969 performances, but that was mostly because International Telephone & Telegraph reported a 28% jump in second-quarter profits.

Autos down. Second-quarter auto sales were off by 16% and auto and truck makers as a group earned 6% less than in the second quarter of 1969. Detroit suppliers—glass for one, and rubber—felt the squeeze. Steel production was down by 5% in the quarter, and steel companies as a group earned 23% less than in the same period of 1969.

In chemicals, besides the 6% decline at Du Pont, second-quarter profits were down 10% for Dow Chemical, 16%

for Union Carbide, and 25% for Monsanto. Defense cutbacks continued to hurt aerospace, and waning capital spending cut into earnings of machinery, railroad equipment and electrical gear makers. Among the computer giants, IBM said second-quarter earnings were up 6% and Burroughs reported a 20% rise. But profits were down 4% at National Cash Register and 80% at Control Data.

Consumer spending rose by \$11-billion in the second quarter, but it is hard to find that money among the consumer goods manufacturers. Among producers of TV sets, Magnavox and Motorola both reported lower second-quarter earnings, while Zenith and Admiral lost money. Both Polaroid and Eastman Kodak reported lower second-quarter profits.

Once again, the hardest-hit groups were construction industry suppliers. Profits for the quarter were down 20% for Johns-Manville, 33% for Armstrong Cork, 16% for Georgia-Pacific, 50% for U.S. Plywood-Champion Papers, and 57% for Boise Cascade.

The profits squeeze continues

No. of cos.	Industry	Sales 2nd qtr. 1970 [\$000]	Percent change vs. 2nd qtr. 1969	Profits 2nd qtr. 1970 [\$000]	Percent change vs. 2nd qtr. 1969	Profit margin	
						2nd qtr. 1970	2nd qtr. 1969
5	Aerospace	\$2,013,858	+ 3.6%	\$45,633	-21.9%	2.3%	3.0%
4	Appliance	458,986	+ 7.5	13,964	-21.0	3.0	4.1
14	Auto, trucks parts	13,287,438	+ 3.1	668,664	- 5.5	5.0	5.5
16	Building materials	788,108	- 4.4	39,219	-25.7	5.0	6.4
29	Chemical	5,328,704	+ 0.8	331,660	-14.9	6.2	7.4
9	Conglomerates	3,997,405	+ 3.9	195,106	+ 5.7	4.9	4.8
8	Container	1,534,999	+ 7.3	79,144	+ 1.2	5.2	5.5
6	Controls, instruments	114,132	- 4.5	3,782	-38.8	3.3	5.2
9	Cosmetics, toiletries	1,012,752	+ 9.1	68,294	+ 6.9	6.7	6.9
14	Drug	1,563,710	+ 8.7	131,826	+ 9.5	8.4	8.4
22	Elec. equip., electronics	5,539,504	+ 0.7	207,342	- 8.9	3.7	4.1
16	Food, beverages	3,114,443	+11.1	126,531	+24.6	4.1	3.6
6	Glass	658,535	+ 3.3	34,030	-11.2	5.2	6.0
15	Machinery	1,581,304	+ 0.1	77,098	-18.7	4.9	6.0
11	Nonferrous metals	2,185,992	+ 7.8	225,594	+19.2	10.3	9.3
10	Office equip., computer	3,085,879	+ 5.7	334,994	+ 4.2	10.9	11.0
18	Oil	14,024,692	+ 7.0	922,868	- 4.5	6.6	7.4
15	Paper	2,070,352	+ 3.6	98,007	-14.0	4.7	5.7
6	Photo equip., optical	1,015,978	- 3.9	103,129	- 7.3	10.2	10.5
5	Plumbing, heating	294,427	+33.9	10,163	+ 8.2	3.5	4.3
11	Printing, publishing	745,779	+ 6.4	37,430	-17.0	5.0	6.4
5	RR equipment	491,434	- 0.3	16,859	-21.0	3.4	4.3
6	Rubber	1,885,176	- 1.7	50,359	-38.3	2.7	4.3
3	Shoes, leather	485,094	+ 5.2	17,923	+ 0.7	3.7	3.9
16	Steel	3,104,115	- 0.1	116,060	-22.8	3.7	4.9
16	Textile, apparel	1,330,331	- 3.6	50,903	-11.1	3.8	4.1
3	Tobacco	1,319,483	+ 4.1	72,517	+ 4.5	5.5	5.5
7	Wood, wood products	1,314,935	- 4.2	49,485	-41.4	3.8	6.2
53	Misc. mfg.	3,695,844	+ 1.5	179,136	- 9.4	4.8	5.4
Total		78,043,389	+ 3.6	4,307,720	- 5.9	5.5	6.1

On the long, rocky road to an auto contract

The United Auto Workers is not "strike happy" this year; instead of one strike, it hopes for three settlements by mid-September. But the union has a fistful of major demands—and the auto industry says the projected costs are way beyond what the Big Three expected or what they can afford.

Negotiations now are well under way. The union has filed economic demands, and the companies have begun their presentations. Subcommittees are at work, and everyone is settling down for the long, hard effort to confound those experts who feel an auto strike is inevitable this year.

Both sides profess to be optimistic because of the serious, hardworking beginning. But privately, industry people and UAW officials concede that it will be hard to reconcile their positions this year. Because of political problems within the union and the uncertain economic situation that worries the industry, neither side will budge easily.

Key demands. Leonard Woodcock, bargaining for the first time as UAW president and following in the footsteps of the late Walter Reuther, has avoided bombastic statements and threats. But recently in Detroit, Woodcock said unionists are "deadly serious" about demands for pension gains, more insurance, increased supplemental unemployment pay (SUB), wage protection through an unlimited cost-of-living clause, and, of course, more pay.

At the same time, Woodcock said that the union, known for breaking new ground in contract talks, would not try to forge into new areas in 1970 because of "distortions in the economy." Instead, he said, it would concentrate on shoring up past contract gains.

Woodcock said that financial support for the SUB program "is grossly inadequate." Layoffs in the aerospace industry have exhausted two UAW funds, while in Canada, a GM fund ran into difficulties recently. The union, wary about what might happen in a recession, wants employer contributions to SUB reserves raised and employers to pay some costs now paid through SUB funds. Further, it wants benefits improved with eligibility extended to any workers with six-months seniority, something now limited to those on the job a year or longer.

'30 and out.' At least a \$500 a month pension after 30 years, regardless of age, is sought by UAW to guarantee retirees an adequate standard of living, Woodcock said. This would be "a realistic, practical device" for making earlier

Both sides are 'serious and optimistic,' but their positions are far apart

retirements meaningful and to open up badly needed jobs for newcomers to the labor force. The so-called "30 and out" retirement demand is not new, but there is every indication that, for the first time, it is a really serious union goal.

According to Woodcock, the union is determined this year to restore the cost-of-living allowance formula "as it existed in the industry from 1948 to 1967," without any limit on the increase. After unlimited adjustments before 1967, UAW agreed to a limit of 8¢ a year. This cost workers 26¢ an hour over three years as prices soared. Now the union wants this amount added to pay, while the Big Three wants to use it in part to pay for the increased costs of fringes.

While the UAW has yet to set a figure on wages—and probably will not until after Labor Day—it has said flatly that auto makers must eliminate a 17¢ wage-fringe differential between auto rates and higher rates in agricultural equipment plants under UAW contracts. **Other issues.** Below these are other demands—some for everybody, others for

particular groups, such as skilled tradesmen, foundry workers, office workers, or technical and professional employees. Although most of these ordinarily would not explode into strike issues, they cannot be brushed aside. If any group is not satisfied, strikes are probable despite any tentative settlement by top negotiators.

Skilled workers, for instance, want more money, over and above any "substantial" raise others get; tradesmen have their sights set on the teamsters' settlement and on the high pay in the construction industry for what they consider to be "comparable" work.

Many production workers object to compulsory overtime and demand that UAW require in new contracts that overtime work be scheduled on a voluntary basis only, except under emergency conditions. And they want such things as group auto insurance, an educational fund, and bonus-pay for vacations to "help defray the additional living and recreational expense a vacationing family incurs."

Beyond these, they want—and UAW is prepared to insist on—more protection against subcontracting and against the production of motors or other components abroad for U. S. cars (foreign components are a growing problem in the compact car field).

Pollution demand. The UAW, now allied with youth and other groups in antipollution campaigns, also has demanded that the industry "protect the jobs of our people" by engineering and development work "to bring the internal combustion engine down to where it operates at acceptable levels [of air pollution] or . . . to develop an alternative engine source."

There also are proposals on such things as studies of yearend bonuses for production workers "as now provided for executives," inverse or reverse seniority to let older workers take layoffs voluntarily, and a stock purchase program.

The industry has criticized the entire package as "beyond anything we expected, much too expensive," and has cited the cost-of-living demand as a particularly critical issue. But when it noted that UAW had paid little attention to urgings of moderation from George Shultz, former Labor Secretary and now Director of the Office of Management & Budget, and Treasury Secretary David M. Kennedy, Woodcock replied tartly, "If they [the companies] take that advice seriously, I don't think there will be a contract." ■

UAW's 'stand on key' issues

Pensions

A \$500 pension after 30 years, regardless of worker's age, plus protection against inflation.

Insurance

More of everything.

Jobless pay

Increased supplemental unemployment benefits [SUB] payments, including 100% pay in short weeks.

Cost-of-living

Unlimited "escalator" increases, ending an 8¢ per year limit.

More pay

So far unspecified "substantial" gains, and equality with pay in farm equipment plants.



WESTERN WATER NEWS



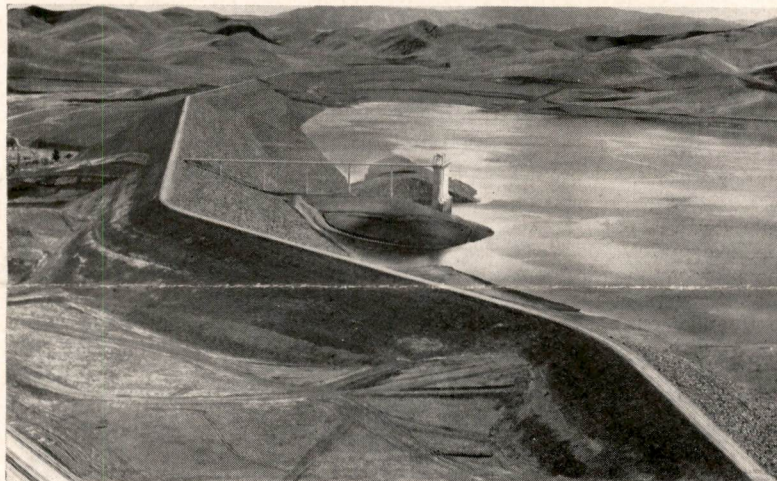
VOL. 20

SACRAMENTO, CALIFORNIA, APRIL, 1968

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No. 4

THREE HUGE DAMS TO BE DEDICATED IN CALIFORNIA



—Bureau of Reclamation Photo
SAN LUIS DAM AND RESERVOIR



—State Dept. of Water Resources Photo
OROVILLE DAM AND RESERVOIR

A Record Attendance

IDA's SPRING CONVENTION

OVER 800 delegates and wives representing member agencies and other interested organizations gathered at the St. Francis Hotel in San Francisco on March 20 for the three-day spring convention of the Irrigation Districts Association of California.

At a luncheon on the opening day, U.S. Senator Thomas H. Kuchel announced that on his return to Washington the following week he would introduce legislation in the Congress to authorize three major California water projects—the East Side Canal, the Peripheral Canal and the Kellogg Project.



Senator Kuchel

The Senator pointed out, however, that construction of these projects would have to wait until the Vietnam war is over. "We will be forced to shift these and other programs into second gear for the time being," he said. "Authorization of these projects will not add a penny to the Federal budget. What a call for authorization will do is force the Administration to state its priorities candidly and to tell the people of California why studies on these projects have been delayed up to five years while our (water) crisis grows." Kuchel was vehement in his attack on "five years of foot-dragging and paper-shuffling" by the Administration on these and other projects.

Kuchel, a member of the Senate Interior and Insular Affairs Committee for 15 years and now its ranking Republican member, ex-

(Continued on page 3, col. 4)

Local and State Roles In Water Development

LOCAL water agencies in California have an investment in water facilities equal to that of both the State and the Federal Governments.

This little known fact was revealed in a talk on "Local Water Organizations and the State" prepared by William R. Gianelli, Director, and presented by P. A. Towner, Chief Council of the State Dept. of Water Resources before the recent Bureau of Reclamation Annual Water Users' Conference in Sacramento.

"In my opinion, local water districts are the foundation of water development and use in California," Gianelli said. "To date, local California agencies have invested more than \$3.5 billion in water facilities as compared to a Federal investment of some \$2.5 billion and a State investment of some \$1 billion. Foreseeable future expenditures by local water agencies will be at least equal to those of the Federal and State Governments."

He also pointed out that to a considerable extent the great success of the Federal Central Valley Project has been due to the existence of

(Continued on page 3, col. 1)

Two of the world's greatest construction jobs will be dedicated in California in the next few weeks.

Both are for water development. Both are basic to the requirements of this State's exploding population, higher living standards and future progress. They are SAN LUIS DAM, to be dedicated on April 20; and OROVILLE DAM, to be dedicated on May 4. Appropriate dedication ceremonies — summarized later in this article—are being planned

for both projects.

New Exchequer Dam Dedication April 27th

AT the local district level, another world's record breaking dam—NEW EXCHEQUER—will be dedicated with ceremonies this Spring on April 27. (See photo of dam in January 1968 issue of "WWN".)

New Exchequer Dam is the major facility of the Merced Irrigation District's Merced River Development Project. Standing at a height of 490 feet, it is the highest concrete faced rockfill dam in the world. New Exchequer Reservoir, behind the dam, will have a storage capacity of 1,025,999 acre-feet of water.

MID's \$85 million multiple-purpose hydro development will ultimately include four dams and appurtenant works, together with power installations totaling 166,000 kw. It also will make possible the full control of floods on the Merced River.

Besides New Exchequer Dam, the initial development includes McSwain Dam (reservoir capacity,

(Continued on page 2, col. 2)

SAN LUIS DAM, sixth largest in the world, is the key facility of the \$435.5 million Federal-State Project. San Luis Reservoir, behind the 320-foot-high-dam, will store up to 2.1 million acre-feet of surplus winter runoff from northern California rivers for irrigation and municipal purposes in the western San Joaquin Valley and for municipal and industrial uses in southern California. Storage of water in the reservoir will have reached about 300,000 acre-feet by the time the project is dedicated.

San Luis Complex

The San Luis Dam Complex is a joint-use project of the Bureau of Reclamation and the State of California. It will serve as a major addition to the Central Valley Project and also as an essential link in the State Water Project. Water released will serve both Federal and State water users through the (Federal) San Luis Canal and the (State) California Aqueduct.

The project was built under the supervision of Region 2, Bureau of Reclamation in Sacramento. On completion, the project will be turned over to the State for operation.

(Continued on page 2, col. 1)

Dedication of Dams

(Continued from page 1, col. 4)

tion. The State will pay 55% of the cost and the Federal Government 45%. Water will be shared in the same ratio.

The offstream water facility is located 12 miles west of Los Banos in San Joaquin County, 100 miles south of its water supply in the Sacramento-San Joaquin Delta. Additional benefits will include power, fish and wildlife enhancement, and recreation.

Dedication Ceremonies

Los Banos Municipal Judge Robert M. Falasco, Chmn. of the Dedication Committee, has announced that Secretary of the Interior Stewart L. Udall, Cong. Bernard F. Sisk and other high-ranking Federal and State officials have indicated they will attend the ceremonies. Also in attendance will be officials from statewide water groups; representatives from local irrigation districts and water agencies; local city and county officers; and a very much interested general public.

Oroville Complex

OROVILLE DAM, standing at a height of 770 feet, is the tallest embankment dam in the Western Hemisphere and the third largest dam in the world in volume of material used.

Lake Oroville, behind the dam, will have a water storage capacity of 3.48 million acre-feet, 750,000 acre-feet of which will be reserved for flood control. The Lake will be about one-half full when the dam is dedicated.

The multipurpose water development complex at Oroville has the basic responsibility of conserving and providing at least one million acre-feet of water and about 2.5 billion kwh of power annually for the \$2.8 billion State Water Project—the largest water supply system built by man. When completed and in full operation, the huge project will provide 4,230,000 acre-feet of

northern California water to 32 contracting water agencies located from Plumas County in the north to San Diego County in the south.

Flood control, power generation, fish and wildlife enhancement, and recreation are other benefits to be derived from the Oroville Dam complex. The development is located on the Feather River five and one-half miles upstream from the City of Oroville.

Dedication Ceremonies

Governor Ronald Reagan will deliver the main address at the dedication ceremonies, scheduled to begin at 10:30 a.m. on May 4 at the damsite. Other notables, who have accepted invitations to attend, include Earl Warren, Chief Justice of the U.S. Supreme Court and former Governor; former Governors Edmund G. Brown and Goodwin J. Knight; U. S. Senator Thomas H. Kuchel; U.S. Representative Harold T. "Bizz" Johnson; State Dept. of Water Resources Director William R. Gianelli and other State water officials; and former SDWR Directors Harvey O. Banks and William E. Warne.

Civic organizations, businessmen and residents in the Oroville Dam area are arranging a gigantic, 5-day celebration in conjunction with the dam dedication.

It is rumored that President Johnson may attend one or both of these dedications.

Exchequer Dam

(Continued from page 1, col. 3)

9,400 a/f) and power facilities at both structures.

The principal purpose of the development is to provide a dependable supply of irrigation water for the District.

Dravo Corporation, Bellevue, Washington, was the general contractor, and the **Tudor Engineering Company** of San Francisco was the design engineer and construction manager.

Army Engineers Will Study San Joaquin R. Basin

The Army Corps of Engineers has initiated an investigation of the San Joaquin River Basin, including the Tulare Lake Basin.

The report, which will take about six years, is expected to be comprehensive in scope and will present a basin-wide plan for flood control and for full development of the related water resources of the basin.

The Corps regards the problems of the San Joaquin River Basin, which is growing rapidly, as many and complex. Prospective solutions, according to the announcement, include reservoir storage, hydroelectric power plants, channel enlargement, levees, diversion tunnels and conveyance channels. These will be

CALIFORNIA'S STAKE IN COLORADO RIVER

"California's Stake in the Colorado River" is the title of a new 24-page, illustrated brochure made available without charge by the Colorado River Board of California, 909 South Broadway, Los Angeles, Calif. 90015—while the supply lasts. The text is intended to assist any Californian to understand better some of the basic elements of the water supply problems faced by 10,000,000 so. Calif. residents who now depend upon the Colorado River to meet 80% of their water needs.

studied in an effort to conceive the most desirable overall plan.

Will Review Past Plans

Inasmuch as the area has been under study for many years by Federal, State and local agencies and many water control structures have been completed and others have been recommended for construction, these previous studies and recommendations will be reviewed along with plans and suggestions of other interested agencies and individuals for both specific and general areas within the Basin.

If, during the course of the investigations, it is found that one or more specific problems can be solved by individual projects which would be consistent with the overall comprehensive plan, consideration will be given by the Corps to the preparation of interim feasibility reports thereon so as not to unduly delay construction of such projects.

A Revised Water Rights Bill

An up-to-date version of the Federal water rights legislation, S. 2919, to clarify the relationship of interests of the United States and the States in the use of water of certain streams, was introduced by Senator Thomas H. Kuchel of California under the title of "The Water Rights Act of 1968".

The bill was sponsored by Senator Kuchel for himself and eight other western senators: Murphy of California; Bennett of Utah; Bible and Cannon of Nevada; Hansen of Wyoming; Hatfield of Oregon; Moss of Utah; and Young of North Dakota.

S. 2919 is a revision of the earlier bills S. 1275, 88th Congress; S. 1636, 89th Congress; and S. 2530, 90th Congress. S. 2530 was reviewed in the December issue of "WWN".

The new bill, like earlier bills, carries the recommendation of the American Bar Association, of which Northcutt Ely is chairman of the Water Resources Committee, Section of Mineral and Natural Resources Law; and a large number of other national, regional, state and local organizations concerned with water resources.

S. 2919 was referred to the Committee on Interior and Insular Affairs and ordered to be printed in the Congressional Record (Vol. 114, No. 16, February 5, 1968).

Notes & Quotes

The Imperial Irrigation District adopted a resolution expressing its appreciation to Rep. John V. Tunney, Riverside and Imperial Counties, for his successful efforts in having \$103,000 placed in the U.S. Dept. of the Interior's 1968-69 budget for a comprehensive Salton Sea study and for the Congressman's support on Colorado River legislation acceptable to California and the IID. At the State level, Assemblyman Victor V. Veysey of Brawley, Imperial County, introduced legislation which would bring about a study of the Salton Sea as a permanent multi-use body of water. The bill declares the prime use of the Salton Sea area is to receive agricultural and other waters. It also would establish recreational uses for the people of the area and California. Veysey's measure calls for a report to the Legislature by January 1969.

★ ★ ★

According to reports, the State of Texas is revising its State Water Plan in typical big-scale Texas fashion—the expansion of its irrigated acreage by 12,816,000, or more, acres. One big question said to be involved in the revised plan is how Texas can develop the water. To irrigate such a vast new acreage, it is estimated that water for 8,239,000 of these acres must be brought into some 15 major project areas from inside or outside Texas. One big facility under study is that of moving Missouri River water to West Texas and Eastern New Mexico. The revised plan also envisions other developments beyond the 12,816,000 acres, called non-project irrigation, which can be done by individual farmers along creeks and from Soil Conservation Service reservoirs. The plan, which will be issued this year, is expected to include data compiled by Texas A&M University to the effect that the State could find markets for the products of 16,780,000 irrigated acres in 2020.

Dr. C. E. Butterworth, Jr., medical scientist at the University of Alabama Medical Center, foresees widespread famine in the not too distant future which, he says, makes it time to start educating doctors in how to cope with old and as yet unknown diseases of malnutrition. Taking his view from the many studies of world population growth in relation to food supply, he found "an overwhelming consensus that famine is a virtual certainty for large segments of the world population" and the impact may hit the U.S. as early as 1974—six years from now. He foresaw an increasing need for the U.S. to husband its food supply because once burdensome surpluses are now down to amounts that would be quickly exhausted should there be a major crop failure. To aid the husbanding, Dr. Butterworth said that medical science must now define "in greater detail than ever before, the optimal nutritional requirements of man."

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Local Districts and State Roles In Water Development

(Continued from page 1, col. 2)

viable, dynamic local agencies, willing and able to assume responsibility for the repayment of costs and the distribution of water, and added that the \$2.8 billion State Water Project is similarly dependent upon local agencies.

State's Role

Describing the State's role in water development, the Department Director said that the Legislature, through the years, had enacted some 40 general district acts and hundreds of special district acts to enable local water users to form more than 1,000 districts to meet their particular water situations.

He explained that the State Government entered the water arena in the 1870's because of the heated controversy between mining and irrigation interests. Also, that the study of irrigation was one of the chief duties of the Office of the State Engineer when it was created in 1878. Gianelli said that DWR's present activities with water districts include the following:

"(1) Statutory responsibilities in the formation and supervision of districts. (2) Review of legislation pertaining to districts. (3) Actions before the California Districts Securities Commission. (4) Construction and operation of the State Water Project. (5) Loans and grants under the \$130 million Davis-Grunsky Act program. (6) Regulatory functions in the supervision of safety of dams, water wells and rainmaking activities. (7) Planning."

He observed that the problem of multiplicity and diversity of districts has been of some concern to the Legislature and the Department, saying: "Legislative study of the problem has resulted in the Uniform District Election Law and the District Reorganization Act of 1965. As the principal water department in the State organization, we are called upon by the Governor and the Legislature to review and comment upon legislative proposals."

Interest Rates

Gianelli said that he was greatly concerned by the high interest rates that districts are being required to pay to borrow money and recommended that managers and directors of districts should start project planning as early as possible to provide an adequate lead time in

case financing must be delayed.

He pointed out that the marketability of the water developed by the construction is substantially dependent upon extensive development of the lands to be served and the construction of distribution facilities to convey the water to the supplier and consumer. "During the next decade, vast sums will be spent on such development," the Director said. "A recent estimate by the Irrigation Districts Association of California placed this amount at approximately \$2.5 billion for their member agencies." (Member districts and agencies of the IDA distribute some 75% of all the water used in California.)

The state water official also noted that for many years the Department, or its predecessor, has been engaged in comprehensive planning for water development in California and that these plans have resulted in projects constructed by local agencies, the Federal Government and the State Government.

The Future

"Future demands for water in California will be sky-high," according to Gianelli. "Future industrial and municipal demands will climb sharply, but we estimate that 50 years from now irrigated agriculture will still account for 75% of the total water use. It is estimated that by that time the amount of irrigated land will increase from 8 million acres to 11 million acres with an increase in annual water requirements from 29 million to 36 million acre-feet."

First Section of Pacheco Tunnel Completed

The first section of the Bureau of Reclamation's 11-mile Pacheco Pass Tunnel for carrying water from San Luis Reservoir to water-short areas of San Benito, Santa Clara, Monterey and Santa Cruz Counties, was completed in February.

According to the construction firm of Dravo Corporation of Pittsburgh, Pa., and Bellevue, Wash., the 1.8-mile excavation was one of the most difficult tunneling jobs of recent years because of its proximity to the active Ortagalita Fault. The geology of the area has been shattered by generations of earthquakes — a number of which occurred during the tunnel's construction.

The project took 36 months to complete and required 3.7 million pounds of steel ribbing — at some places as close as two feet apart. The 18-foot diameter, horseshoe-shaped excavation is lined with 2½ feet of concrete.

Pacheco Pass Tunnel, paralleling Highway 152, is a part of the Bureau of Reclamation's San Felipe Division of the Central Valley Project.

Coming Events

- ▶ Western Snow Conference, Sahara Tahoe, April 16-18.
- ▶ Spring Meeting, Calif. Society of Farm Managers and Rural Appraisers, Yosemite Lodge, Yosemite Valley, April 26.
- ▶ Water Project Dedications: San Luis Dam, April 20; Exchequer Dam, April 27; Oroville Dam, May 4; Kern County Water Agency facilities, May 17.
- ▶ State Chamber of Commerce 41st Annual Statewide Meeting, El Dorado Hotel, Sacramento, January 16, 1969.

J. Robert Roll Enters Private Practice

J. Robert Roll has resigned as Chief Engineer for the Santa Clara Valley Water Conservation District to enter private practice as a consulting engineer.

He served SCVWCD continuously since 1932, beginning immediately after his graduation from the University of Santa Clara. During this 35-year period, he has served the District as surveyor; as hydrographic engineer; as assistant chief engineer and, from 1954, as chief engineer.

In 1949, Roll designed and supervised the construction of Leroy Anderson Dam in Santa Clara County, which at the time was the second largest earth and rock dam in the State, and later that of Lexington Dam. In 1957, he was responsible for revamping SCVWCD's existing distribution and percolation facilities for the percolation of an additional 100,000 acre-feet per year of imported water.

Wide Experience

Roll is a member of the Executive and Underground Water Committees of the Irrigation Districts Association and is Chairman of its Special Agencies Section. He also serves on the Ground Water Management of Flood Control Criteria Subcommittees of the State Chamber of Commerce and is a member of the Technical Division of the National Water Well Assn.; the American Water Works Assn.; the National Reclamation Assn.; and the Weather Modification Assn. In addition, he has been called upon to assist technical delegations from several foreign countries in solving their ground-water problems.

As a consulting engineer, Roll will be specializing in special district formation and management; ground-water problems; water rights; and earth dams. His address is: 100 Oak Rim Way, Apt. 19, Los Gatos, Calif. 95030.

The Imperial Irrigation District concrete lined a total of 344.13 miles of lateral canals on a participation basis with farmers from 1954 through 1967 as one of its several activities to conserve precious water supplies from the Colorado River. Number of miles of canals concrete lined in 1967 totaled 60.64.

IDA Convention

(Continued from page 1, col. 1)

plained that one billion dollars in water projects had been authorized by the Committee for California but only a fraction of that amount ever received Congressional approval.

Whitaker on Politics

In a luncheon address the following day, Clem Whitaker, Jr., President of the nationally-known public relations and campaign firm of Whitaker & Baxter, discussed the "Political State of the Nation", and delivered encouraging news to Kuchel fans.

"If Kuchel takes the primary, he will be an odds-on favorite for reelection in November," Whitaker stated. "If Max Rafferty is the Republican nominee he would have a tougher time in November but could probably pull off a victory." Whitaker also had some intriguing comments on the possibility of two Californians, Governor Reagan and Assemblyman Unruh, opposing each other on a national ticket.

Other Addresses

Caspar W. Weinberger, newly-appointed California State Director of Finance, addressed the morning General Session on Thursday on the subject of Regional Government and Reorganizational Plans.

Weinberger was followed on the program by George B. Maul, Chair of the State Water Resources Control Board, and by Robert Brown, Executive Vice President of the California Taxpayers Association.

Excellent Section Meetings

Public relations for local agencies and the impact of regional government proposals on public water districts were among the subjects covered during IDA Section meetings on Wednesday and Thursday. Programs in each section were designed to fit the interests and answer the particular questions of members of each section. Also discussed were problems in relocating facilities, waste water reclamation and the various acts under which agencies are formed.

Gianelli Reports

Department of Water Resources Director William R. Gianelli presented a graphic picture of the progress in the State water program to the Friday morning General Session. Up-to-date slides of the State Water Project around the State dramatically illustrated the progress being made.

Gianelli's talk was followed by a discussion of the Joint Committee on Open Space Lands by its new Executive Director, John C. Williamson.

Beautiful weather was provided by San Francisco for the entire convention, hailed by many as one of the best in recent years. IDA's 1968 Fall Convention is slated for December 4, 5 and 6 at the Disneyland Hotel in Anaheim.

The people residing in the five California counties of Los Angeles, Orange, Riverside, San Bernardino and Ventura represent almost half of the State's population of approximately 20,000,000.

WATER IN SUBSIDING AREAS OF CALIFORNIA

A professional paper (497-A) on physical and hydrologic properties of waterbearing deposits in subsiding areas in central California may be purchased for \$4.25 from the U. S. Geological Survey at 504 Custom House, 555 Battery St., San Francisco. The paper describes testing methods and presents and evaluates resultant data on the hydrologic, physical and engineering properties of undisturbed cores of subsiding sediments in the San Joaquin and Santa Clara Valleys, California.

Water Council Delegates

Assemblyman Carley V. Porter, 38th District, Chmn. of the Assembly Water Committee, has been re-elected to a third one-year term as chairman of the **California Advisory Committee on Western States Water Planning**.

The Committee, which was created by the Legislature in 1965, advises the Governor, the Legislature and California's delegates to the 11-member Western States Water Council on regional water planning.

California delegates to the Council are: State Dept. of Water Resources Dir. **William Gianelli**; Colorado River Board Chmn. **Raymond Rummonds** and Sen. **Gordon Cologne**, Chmn. of the Senate Water Resources Committee.

Re-elected Vice-Chmn. of the Advisory Committee was **Jerome Gilbert** of Novato, Chief Engr., North Marin County Water District. Other members are: **James F. Sorensen**, Visalia, IDA Executive Committee member and Pres., National Reclamation Association; **William H. Jennings**, San Diego, Vice-Chmn. of the California Water Commission; **Joseph Jensen**, Los Angeles, Chmn., Metropolitan Water District Board of Directors; **Sen. Lawrence Walsh**, Huntington Park; and **Theodore George**, Marysville.

No. Bay Aqueduct

First water deliveries were made early this month from the **State Water Project** through the **North Bay Aqueduct** facilities to the **Napa County Flood Control and Water Conservation District**.

NCFWCWD (entitlement, 25,000 a/f annually) will transmit water from the newly-completed, first phase of the aqueduct to water users in Napa County. The water now being pumped into the county was purchased from the Bureau of Reclamation by DWR to meet State Water Project commitments in that area.

POSITIONS OPEN

GENERAL MGR.—Goleta County Water District with 10,000 services in a rapidly growing Santa Barbara area wants an experienced person able to promote both public and employee relations. Demonstrated administrative experience. Salary open. Confidential. Send resume to Geo. W. Smith, Board President, 1743 San Marcos Pass, Santa Barbara, Calif. 93105.

☆☆☆

ENGRS.—Several career positions open for both recent grads and experienced engineers with expanding Water District in northern San Francisco Bay area. Duties in general hydraulic or structural design, and materials control. Send resume or apply: Personnel Dept., Marin Municipal Water District, 220 Nellen Ave., Corte Madera, Calif. 94925. An equal opportunity employer.

☆☆☆

MGR.—Wanted by the Jackson Valley Irrigation District, Route 1, Box 235, Lone, Calif. 95640. Letters of application containing biographical information, education, experience and references of applicant and any other relevant information should be mailed to the District.

Work Begins On S.J. Valley Drain

The Bureau of Reclamation has awarded a \$246,433 contract to **Darkenwald Construction Co., Inc.**, Sacramento, launching construction of the first section of the \$56.6 million **San Luis Drain** as a part of the Bureau's San Luis project facilities in western San Joaquin Valley.

The 7-mile section, near Mendota, is part of the first-phase drain construction program which includes a total of 62 miles of main drain and the **Kesteven Regulating Reservoir** near Gustine. Completion date for the 7-mi. section, January 1969; for the initial 62-mile drain and first stage of the reservoir, December 1969.

Subsequent construction will carry the drainage waters on to the Sacramento-San Joaquin Delta to a final discharge point, location of which is still under study. Also under study by both Federal and State agencies is the development of denitrification processes for possible treatment of the drainage waters.

Colorado River Flow Dips

The American Water Works Assn.'s publication "Willing Water" says that in testimony before the House Subcommittee on Irrigation and Reclamation. Secty. of the Interior **Stewart Udall** indicated that the Dept. now believes that the 62-year average runoff of the Colorado River is 14,963,000 a/f annually, a drop from 15,063,000 a/f which previously had been testified to.

"Willing Water" also said: "It was clear that the water supply in the Colorado is not sufficient to meet developing demands. Augmentation of the Colorado is necessary if there is going to be sufficient water for all requirements. (Note: During the Colorado River Compact negotiations, prior to 1922, the dependable average annual supply from the river was considered to be 17 million a/f. The average annual runoff since 1930, however, is reported as only 13 million a/f.)

Jansen Fills New Post At DWR

Robert B. Jansen, Chief of the California Dept. of Water Resources Division of Dam Safety for the last three years, was named on March 6 to the new post of Division Engineer for the State Water Project Operations and Maintenance by **William R. Gianelli**, DWR Director.

Under Jansen's jurisdiction will be 20 reservoirs with a total storage capacity of 6,802,000 acre-feet of water; seven power plants with a total capacity of 1.5 million kw and total annual output of 6.2 billion kw; and 21 pumping plants to move more than 4 million acre-feet of water annually through almost 700 miles of aqueducts.

Jansen topped a list of 125 applicants for the job throughout the Nation in a competitive examination.

Actions and Reactions

The Kern County Water Agency and the Water Association of Kern County are planning a celebration on May 17 when the first water from the State Water Project is expected to reach that area via the California Aqueduct. Oroville Dam, key facility of the \$2.8 billion State water development project, will be dedicated on May 4. Water flowing from Oroville Dam when it is dedicated on May 4 is expected to reach Kern County on May 17 at which time it will receive a second dedication by the local citizens in recognition of its service to them. **Allen Bottorff** and **Monroe Browne** are co-chairmen of the celebration.

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Spring began with statewide precipitation for the water year in California averaging about 80% of normal, according to the State Dept. of Water Resources. Generally, precipitation has been fair in so. Calif., good in no. Calif. and poor in the central portion of the State. Reservoir storage is above average and groundwater levels are up from those of a year ago. Storage in 119 major reservoirs in California was 115% of average for March 1, which was 65% of total capacity.

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Total acreage of crops receiving water from facilities of the **Imperial Irrigation District** increased from 581,744 in 1966 to 607,054 acres in 1967—a gain of 25,310 acres. Kind and acreage of major crops grown in 1967 were: irrigated field crops 532,209 (alfalfa, barley, head corn, sugar beets, cotton and rye grass); irrigated garden crops, 69,671 (lettuce, cantaloupes, carrots, watermelons, onions, cabbages); irrigated permanent crops 5,174 (asparagus, oranges, grapefruit and mixed citrus).

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The California State Depts. of Public Works and Water Resources have developed a plan to use the same maintenance facilities and personnel—so far as practicable—to service those stretches of the California Aqueduct and the West Side Freeway (Highway I-5), which parallel each other for about 200 miles in the San Joaquin Valley. The Depts. figure that considerable savings in facilities and maintenance costs can be made by adoption of such a plan—following completion of the two projects.

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Ralph M. Brody Mgr. and Chief Counsel for the 600,000-acre **Westlands Water District**—Fresno and Kings Counties—estimates that supplemental Federal water (just under 1,500,000 a/f annually) to be received from the San Luis Unit of the CVP will boost cash farm income in the District's service area \$70 million a year to a total of \$225 million. Because of the tight money situation, completion date for Westlands' distribution system by the Bureau of Reclamation has been moved up from 1969 to 1972.

☆☆☆

Myron B. Holburt has been designated Chief Engr. of the Colorado River Board of California, subject to Civil Service procedures, succeeding **Dallas Cole**, who retired March 7. Holburt has been Principal Hydraulic Engr. for the Bd. since 1965. He has held many important assignments in the field of water, including some as far away as Pakistan and Peru. The State agency is responsible for protecting the rights to divert water from the Colorado River, which is relied upon by 10 million citizens in so. Calif. to meet 80% of their needs.

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Joseph Jensen, Chmn. of the Metropolitan Water District Board of Directors, was presented a 25-year service pin on March 12 in recognition of almost continuous service as one of the Board's representatives from the City of Los Angeles since 1940. Jensen has served as MWD's Board Chmn. since 1949. Vice-Chmn. **Warren W. Butler** made the presentation.

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The U. S. Geological Survey reports the average annual flow to the ocean of the Columbia River to be 182,400,000 acre-feet, and the ocean flow of the Colorado River to be only 170,000 acre-feet—a difference of 182,230,000 acre-feet.

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Charles H. Lawrance, an authority in the field of public health engineering, has been appointed to the newly created post of **Dir. of Environmental Engineering of Koebig & Koebig, Inc.**, 58-year-old Los Angeles-based engineering-architecture-planning firm.

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Excavation of trenches began in March for the purpose of geological exploration at Diabolo Canyon (near the coast in San Luis Obispo County) for the second nuclear power unit which the Pacific Gas and Electric Company proposes to build there. PG&E has received California Public Utilities Commission approval to build Unit 1 and is awaiting a construction permit from the U.S. Atomic Energy Commission. The firm has filed application with the CPUC for authorization of Unit 2.

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Assemblyman **Carley V. Porter** of Compton, California, was named as "National Conservation Legislator of the Year 1967" in the third annual Conservation Achievement Program conducted by the National Wildlife Federation, world's largest private conservation organization.

☆☆☆

F. P. Bystrowski, who was Chief Engr. with Oro Dam Constructors for construction of Oroville Dam and Oroville Dam Spillway; Asst. to Vice-Pres., **Merritt Chapman & Scott Corp.**, engineers and constructors; and Foundation and Soils Engr. with **Mueser Rutledge, Wentworth and Johnson**, consulting engineers, has established a firm for consulting and engineering for heavy construction contractors and engineers under the name of **F. P. Bystrowski & Co.**, P. O. Box 323, Chico, Calif. 95926.

Mining coal for hungry steel mills

Huge new Kaiser complex will send Japan 5-million tons a year

It was hands-across-the-sea as well as hands-across-the-border in British Columbia last week as Japanese customers and Canadian officials joined Kaiser Resources, Ltd., in inaugurating the company's \$110-million coal-mining and shipping complex. In pomp, glitter, and duration, the two-day dedication outshone the opening of a U. S. super-market. Even Prime Minister Pierre Elliott Trudeau hopped over from Ottawa to cut the ribbon and impart his benediction.

The coal mine at the center of the excitement was not even a new one. Yet the reasons for the fanfare were not hard to find:

- The world steel industry desperately needs coking coal. Canada has a good deal of it. And Kaiser has fashioned a mechanized system for mining and shipping it on a gigantic scale that sets new standards for economic management of resources.

- Japan's need for coking coal is acute and growing more so. The Japanese steel industry more than tripled production in the last 10 years and hopes to double it again in the next 10, perhaps even dropping the U. S. to second place in the non-Communist world. But Japan is very short of all fossil fuels and will have to import 90% of its coal.

That is why President Chujiro Fujino of Mitsubishi Shoji Kaisha, Ltd., and Vice-President Hisao Makita of Nippon Kokan K. K. headed a large delegation of Japanese steel and shipping executives at the British Columbia ceremonies. Kaiser is committed to sell them 75-million tons of coal at \$12.85 a ton (FOB Vancouver) over the next 15 years.

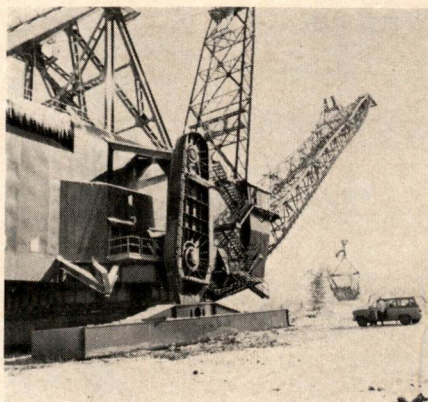
Billions. The Kaiser complex is in two parts. One is a 108,000-acre tract in the Rockies at Fernie, B. C., that contains proved reserves of 135-million tons of high-quality metallurgical-grade coal in the first 20,000 acres to be explored. A royal commission 25 years ago estimated 7.4-billion tons of coal may lie within a 50-mi. radius.

The other part is a 55-acre "island," man-made from dredged silt, in the Strait of Georgia. It is 3 mi. off the coast near Vancouver and is linked to the mainland by a narrow strip of land, also dredged silt from the tidal flats. The causeway, in turn, supports a 24-ft.

roadway and a single-line railroad track.

Kaiser Resources, a subsidiary of California's Kaiser Steel Corp., owns the Elkview Mine property, but rents the "island," Roberts Bank, from the Canadian government as a deep-water shipping terminal—known as a superport in maritime jargon because it will take bulk carriers up to 125,000 tons.

A 685-mi. ribbon of railroad track joins the two. On it, the Canadian Pacific Ry. operates a fleet of three unit-trains to provide a virtually continuous flow of coal from mountain to sea. The objective, after the present shakedown period, is to maintain such a flow that the big carriers can be bulk-loaded, either from huge stockpiles or directly from CP's specially designed gondola cars, at 6,000 tons per hour. The railroad designed the trains for as many as 100 cars each, hauling as much as



Self-propelled dragline can pick up 54 cu. yd. of coal in a single bite.

10,000 tons at a clip on the 36-hour one-way run. If the system hits its target of 97,000 ton-miles per round-trip hour, it will be the most efficient unit-train operation in North America, according to Kaiser.

Kaiser's coal deposits are not in virgin soil. They were mined as far back as the turn of the century, and their previous owner, Crows Nest Industries, Ltd., continued to mine them until a few years ago. But rising transportation costs, obsolete mining technology, and radical changes in energy sources made the operation economic suicide.

Titans. Massive scale is the key that Kaiser President Jack J. Carlson expects will open the treasure chest. By assuring Canadian Pacific sufficient tonnage to justify a \$48-million capital outlay, Kaiser was able to negotiate a freight rate of \$3.50 a ton. To strip-

mine tonnage of that magnitude, the company custom-designed such equipment as a 54-cu.-yd. walking dragline and giant trucks that can handle 200-ton loads of coal. Mechanization at the superport includes a machine that seizes a loaded gondola car and without uncoupling it, turns it over to discharge its load, then sets it back on the track and pulls the next car into position for dumping—all in 100 seconds.

"Sometimes," says Carlson, "I get the feeling that the international steel business is really the transportation business because transportation costs loom so large in the finished product. Shipping costs can represent from one-half to two-thirds the delivered cost of steel-making raw materials."

Carlson has maneuvered Kaiser Steel into a position to cash in three ways from the exploding worldwide demand for steel that saw production jump from 340-million tons to 630-million tons in the 1960s and is forecast to reach 900-million tons to 1-billion tons by 1980. Ranking 10th among basic steelmakers in the U. S., Kaiser earns a moderate return on its bread-and-butter activity (\$25.7 million after taxes on \$420-million sales last year). It is now increasing its 2.9-million-ton steel capacity by 500,000 tons.

Kaiser Steel and the related Kaiser Aluminum & Chemical Corp. jointly own a steamship transportation company that has barely got started but can be expected to compete for some of the long-haul ocean commerce that both companies generate. In addition to shipping coal from Canada to Japan, the steel company ships coal from Utah to Japan and iron ore from California and Australia to Japan and Europe. Kaiser Aluminum ships bauxite and alumina from Jamaica and Australia to New Orleans and Tacoma—and, oddly enough, iron ore from its own mine in Canada to the same Japanese steel companies that buy Kaiser Steel's coal. Muscle in raw materials is a Kaiser family hallmark.

Running short. But Kaiser may be a rarity among steel producers in the determined position it has taken as a producer and marketer of merchant coal. Most big steel companies have captive coal mines to meet their blast furnace needs for coke; they may even sell or trade some to balance inventories. Kaiser does that too. But in addition it has now plunged headlong into the coal business for its own sake.

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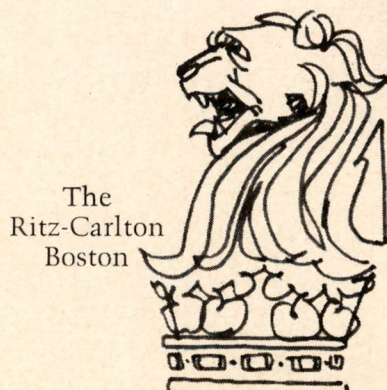


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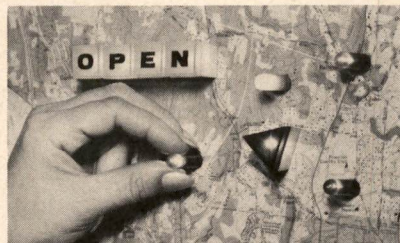
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production by 1980, steelmakers around the world will need an additional 200-million tons of coal per year—at a time when resources are already strained to produce enough coal for 630-million tons of steel. Some U.S. steel producers that normally have a 90-day supply of coal on hand, are now down to a 10-day supply. The reasons: booming prices for coking coal on world markets, labor problems at home, and the new Coal Mine & Health Safety Act, which is hampering production.

Fordham University's Reverend William T. Hogan, S. J., recognized by the industry as an authority on steel economics, says there is plenty of coal, worldwide, that meets the coking specifications of low ash and low sulfur—as much as 268-billion tons in the U.S. alone. But, says Hogan, much of the coal is either inaccessible or too far from where it is needed, and young men are hard to recruit for the nasty work of underground mining. The U.S. has abundant underground reserves, but it is eating into its above-ground

In the end, says Hogan, 'if the price is right, the coal will be produced'

stockpile, burning more than it is mining. Six weeks ago, Hogan estimated the U.S. stockpile at 50 days' supply. And now some electric utilities, under pressure to stop befouling the air with their stack emissions, are paying premiums up to \$5.50 a ton for metallurgical coal because it burns cleaner than steam coal.

Demand. Even with Kaiser's 5-million tons per year and other long-term import contracts aggregating 50-million tons, Japan faces a 1980 deficit of 33-million tons, says the Fordham economist. One remedial step Japan has taken is to lend \$25-million at generous terms to the Island Creek Coal Div. of Occidental Petroleum Corp. for development of a mine to yield 2-million tons a year. In the end, says Hogan, it all comes down to a simple exercise in supply-demand economics: "If the price is right, the coal will be produced."

But not all Canadians laid out the red carpet last week. A few pickets were on hand in Vancouver with placards demanding cessation of strip-mining. And the *Vancouver Sun* raised an "ecological question mark" about the whole project. The editor reserved his apocalyptic rhetoric, however, for the rail line that divides a pleasant little coastal town to reach the superport. "The host municipality of Delta," he growled in an editorial, "has been treated as though it wasn't there. There is no need to wait for the verdict of history to show that the placement of the feeder railway into the port was sheer bloody-minded vandalism." ■

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American companies proclaim their presence abroad in neon signs that light the skyline of almost every major foreign city. But like the well-disguised budget of the Central Intelligence Agency, the expatriate economy that U.S. companies have constructed lies hidden away in dozens of separate national income tables. It is not that the U.S. is shy about disclosing the full dimensions of its foreign holdings, despite years of rhetoric about "economic imperialism." The fact is that economists only recently have come to view these multinational operations as part of a pattern of development quite distinct from their geographical settings.

Yet it is an "economy" that the multinational companies have created. And it has a dynamic of its own that does not fit comfortably into conventional modes of thought. It is, in addition, a giant. When all the pieces are put together, the total annual production of American companies abroad comes to some \$200-billion, about equivalent to the gross national product of Japan.

The multinational economy is also exhibiting a growth rate that is closer to Japan's than to the more leisurely pace of the U.S. According to the Commerce Dept., private direct investment has just about doubled since 1962 and last year rose by nearly 9% to \$71-billion. Sales by foreign manufacturing affiliates rose more than 12% in 1968 (the last year for which figures are available) to a total of nearly \$60-billion. Perhaps symptomatically, while corporate profits barely inched forward in the U.S. last year, the foreign earnings of American companies jumped by more than 13%.

Dream. To Judd Polk, economist at the U.S. Council of the International Chamber of Commerce, this growth is the product of a new industrial revolution, similar in scope to the one that produced a continental market for the U.S. "The state of industrial technology—very much including world electronic communications and computers—has created the situation in which, for the first time, men are in a position to treat the world itself as the basic economic unit," he says.

Polk and many others see the multinational corporation as the in-

strument for achieving what has been the dream of economists since David Ricardo first set forth the "law of comparative advantage" in 1817: a fully rational international division of labor that will "optimize" the productive resources of the world. Critics, on the other hand, fear that combining decentralized production around the world with centralized management in a few cities such as New York, London, and perhaps Tokyo, could lead to the development of a "branch-plant mentality" on a worldwide scale.

The debate—which in many ways is a replay of the free trade vs. protectionist arguments of the 19th Century—is leading economists to examine much more closely the forces that impel



Economist Ricardo: International trade makes everybody better off.

American companies to go abroad in ever-increasing numbers.

The motivation traditionally cited by both classic economists and Marxists—that companies go abroad to get cheaper sources of raw materials—is clearly on the wane. Mining and petroleum account for a steadily declining slice of new investment, from more than 50% a decade ago to less than 25% now, and there has also been a steady erosion of the share of private capital going to less-developed countries.

Nor is the movement a flight away from high U.S. labor costs, despite growing suspicions to the contrary on the part of the U.S. labor movement. Most foreign investment is in capital-intensive, not labor-intensive, industries. Moreover, very little of the out-

put of foreign plants winds up in the U.S. market, which would be the case if the "runaway plant" argument held water. In 1968, only about 8% of the sales of foreign manufacturing affiliates showed up as U.S. imports—and about 80% of this amount originated in Canada, where labor market conditions are so similar that even many of the unions are the same.

The lure. The explanation is that American companies have gone abroad primarily to exploit their own comparative advantages. They have discovered economies of scale for a worldwide enterprise that outweigh political risks, financial regulations, and the intricate difficulties of adjusting business practices to a different cultural setting.

In part, the advantages are financial. The multinational corporations are the largest accumulations of wealth the world has ever seen. For many, annual sales outrank the GNP of most countries. Moreover, they have ready access to the U.S. capital market, which over the long run can provide virtually unlimited funds.

Size and diversity are also advantages. A small company, even when it is operating on its home territory, is naturally reluctant to risk a couple of million dollars on a new enterprise. For a billion-dollar corporation, such ventures are routine—and are, in fact, more acceptable the more they are spread over the globe.

Beyond this, the multinational corporation is the device for applying, on a worldwide scale, the managerial expertise that had been developed in the continent-wide, mass-consumption American economy.

Professor Raymond Vernon of the Harvard Business School believes that much of the impetus behind foreign direct investment can be accounted for by the operation of an "international product cycle." As the wealthiest mass market in the world, the U.S. provides the most scope for consumer innovation and is usually where new products are developed. In the second stage, the product is exported to countries that rank just below the U.S. in per-capita income. At this point, American companies commit themselves by investing in expensive distribution systems, often including brand-name advertising. In stage three, the local market becomes large enough to sup-



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port manufacturing operations, and U. S. companies begin to establish branch plants. Gradually, earnings from exports are replaced by repatriated profits.

For some industries, there appears to be a fourth stage—that of genuinely multinational operations in which a company with a network of facilities expands the plants where costs of production are lowest and begins to export to third-country markets.

By-products. The theory of the product cycle, particularly if it is expanded to include research-based industries such as computers and telecommunications, helps explain why American companies may have an initial advantage in exploiting foreign markets. It does not say much about whether a far-flung empire has enough long-run advantages over purely local enterprises to offset obvious disadvantages, including political ones.

One of the chief arguments for tolerating U. S. ownership of significant shares of key industries is that such direct investment leads to the "export" of the elements that have made American business the most productive in the world. A British economist, Professor John Dunning of the University of Reading, notes that while U. S. subsidiaries have a productivity rate 20% higher than their British competitors, the gap was twice as large only 15 years ago. He says that there have been "substantial spillover effects" from the imported management expertise "on competitors, suppliers, and customers of each U. S. firm and on management and labor practices in the British economy in general."

Criticism. Still, it is largely because of their obvious advantages that the multinational corporations have come under strong critical attack. The complex network of international economic relations that they are forging has immeasurably complicated the age-old question of conflicts between private profit and public interest. And from the AFL-CIO executive council to the new Marxist president of Chile, the giant concerns face a bill of particulars that is lengthy—and somewhat self-contradictory.

In Ricardo's classic demonstration, international trade made everybody better off. But critics say that both the U. S. and the host countries can be made worse off by the operations of multinational corporations. Evidence is shaky but there is enough apparent logic in their analysis to put the companies on the defensive in both places.

Though they have injected \$38-billion worth of repatriated profits into the U. S. economy over the past decade, the multinationals' rise has probably had an adverse effect on American output and employment. Because com-

panies have found it profitable to build plants abroad, foreign production has replaced exports. Not only has this meant fewer jobs and slower economic growth in the U. S., it has also generated balance-of-payments problems that are still far from being resolved.

While host countries have clearly benefitted from new productive facilities, foreign-owned investment does not always have the same impact on economic development that purely local enterprise would have. A wide variety of ancillary activities that ordinarily would grow up on the periphery of any large operation are performed elsewhere. Profits that might otherwise find their way into domestic capital formation instead go abroad. And, in some cases, the multinational companies have added to the "brain drain" by attracting and moving around the competent professionals who might have become valuable additions to a local entrepreneurial class.

Headaches. On another level, the rise of multinational enterprise has immensely complicated the responsibilities of governments for economic management. It is doubtful whether Canada, for example, could ever set economic goals independent of developments in the U. S. economy. In other,

**British management
has improved substantially
through U. S. methods**

less extreme cases, investment trends may be tied more to conditions in the U. S. than to the local scene.

Many of the strains that have developed in the international monetary system are probably a direct result of the operations of multinational corporations. Much of the time, what looked like huge "hot money" flows of currency speculation in the past couple of years were actually the cash balances of the multinational companies sloshing back and forth across borders in an understandable search for security against devaluation. Largely because of these movements, West Germany has been caught in a real bind: If it raises interest rates to dampen its runaway boom, it attracts a huge flow of international funds; if it lowers interest rates, it adds fuel to the boom.

Part of the feeling of apprehension among economists and government officials about the multinationals is that the "multinational economy" is so new a phenomenon that its rules of operation have only begun to be understood. And much of the future of multinational enterprise probably hinges on whether the companies can learn to manage their affairs in a way so that foreign investment is as demonstrably compatible with national economic interest as foreign trade.

Liabilities of Business Failures

The National Bureau of Economic Research is the generally recognized leader of business-cycle analysis. At four different times—in 1938, 1950, 1961 and 1967—that organization has published lists of series of economic data that appeared to be related to cycles in business activity. Each succeeding study was intended to extend and update the results of the preceding study.

Included among the indicators of business-cycle trends in the earliest published list through the most recent is the inverted series, liabilities of business failures. The National Bureau found that the cyclical trend of this series usually had changed prior to such changes in the trend of general business activity. Until the most recent list of indicators was published by the National Bureau, inverted liabilities of business failures was included in the "short list" of primary leading indicators. The series comprising the short list are considered the most reliable of the business-cycle indicators. Although the liabilities of business failures series now receives less attention than it once did, a study of recent developments in this series may be useful.

Data on the number and liabilities of business failures are gathered and made available by Dun and Bradstreet, Incorporated. Business failures data are limited to industrial and commercial enterprises; they exclude such concerns as railroads, banks, other financial companies, holding companies, real estate and insurance brokers, and a few others. Liabilities, as reported herein, are seasonally adjusted monthly amounts of current liabilities, including all accounts or notes payable and all obligations, whether in secured form or not, known to be held by banks, officers, affiliated companies, supplying companies, or the government, but excluding long-term, publicly held obligations. Offsetting assets are not taken into account.

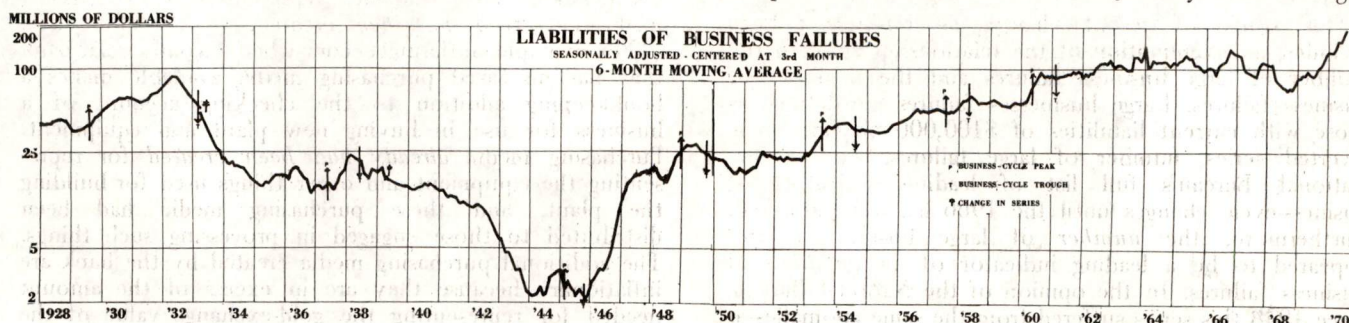
Historically, peaks and troughs in the 6-month moving average of liabilities of business failures have generally preceded, respectively, the troughs and peaks in general business activity designated by the National Bureau. This relationship is discernible in the accompanying chart. For example, a cyclical low occurred in the liabilities series in January 1951, and a cyclical peak in business activity

occurred in July 1953. The liabilities series reached a peak in February 1954, and business activity reached a cyclical trough in August 1954.

The leading aspect of the inverse relationship between the liabilities series turning points and the business-cycle turning points has not held in every instance. For example, a peak in the liabilities series *followed* by one month the April 1958 business-cycle trough. Furthermore, some business-cycle turns have occurred without a clearly recognizable turn in the cyclical trend of the liabilities series. The business-cycle trough in February 1961 without an obvious peak in the liabilities series illustrates this point. Also, what one might interpret as a cycle in the liabilities series might not be accompanied by a cycle in business activity. The change in the liabilities series during late 1963 and early 1964 is an instance of such a development.

Apparently because of the anomalies described above, the National Bureau dropped the inverted liabilities of business failures series from the 1966 "short list" (published in 1967) of business-cycle indicators. (The Bureau did retain this series on the full list.) However, these anomalies do not preclude the use of the liabilities series as a device for assessing the condition or prospects of business activity in all situations.

For example, to use the liabilities of business failures as one indicator of the general financial condition of U.S. businesses seem valid. In fact, the National Bureau lists this series under the classification, Credit Difficulties. As a measure of financial trouble, this series indicates that U.S. businesses since late 1968 have been experiencing a period of financial hardship greater than that during any period since the adjustment to peacetime activity following World War II. From August 1968 through July 1970, the 6-month moving average of the monthly amount of liabilities of business failures has increased about 160 percent, from a level of about \$70 million to approximately \$184 million, and no cessation of this upward trend is now apparent. Since 1950 the previous greatest cyclical increase in the liabilities series was about 120 percent, which occurred from January 1951 through



February 1954. The increase in the liabilities series associated with the business recession of 1957-58 was about 80 percent, and that which occurred before and after the business-cycle peak of May 1960 was nearly 70 percent. The cyclical upward trend of the liabilities series associated with the Great Depression of the early 1930's amounted to an increase of about 150 percent.

The liabilities of business failures series also may be useful in assessing the likelihood that a business contraction has ended. The liabilities series never has continued to increase for a substantial period following a cyclical trough in general business activity. In fact, except for the 1-month lag at the business-cycle trough of April 1958, the liabilities series stopped increasing prior to every business-cycle trough.

Because the liabilities of business failures series is a 6-month moving average that is centered at the third month, this series lags the most recent month for which data are available by 3 months. And because the liabilities data for a given month are made available with nearly a 2-month lag, the total lag between the liabilities series and the current month is about 5 months. Thus, the most recent month plotted on the accompanying chart is July 1970. Therefore, we cannot at this time ascertain if the average liabilities of business failures series has ceased increasing during the latter months of 1970 and thereby assess the likelihood that the recent business contraction has ended. The data that become available in the coming months presumably will permit us to evaluate better these possibilities. However, the monthly liabilities of business failures through October give no indication that the upward trend of the liabilities series has ended.

If the inverted liabilities series were dropped from the "short list" in 1966 because of its poor timing and conformity record since 1948, at some future time the National Bureau might restore the liabilities of business failures series to its "short list" of business-cycle indicators. On the matter of timing, the National Bureau weights current periods more heavily than it does earlier, though longer, periods. It seems that the record of the inverted liabilities series since 1965 might be scored quite high on timing and conformity with the business-cycle. The substantial increase in this series during 1966 preceded the December 1966 peak of the Federal Reserve Board index of industrial production, which apparently is a reliable coincident indicator of business-cycle trends. The beginning of the downward trend in the liabilities series led by 7 months the June 1967 trough in industrial production. And finally, the upward trend of the liabilities series that began in August 1968 led by 11 months the downturn in industrial production that began after July 1969. Future changes in the liabilities of business failures series may provide additional evidence that the inverted series should be restored to the "short list" of primary leading indicators of business-cycle changes.

Our study of recent changes in business failures included an examination of the relationship between the number of large business failures and the liabilities of business failures. Large businesses failures are defined as those with current liabilities of \$100,000 or more. The inverted series, number of large failures, was on the National Bureau's full list of leading indicators of business-cycle changes until the 1966 list was published. Furthermore, the number of large business failures appeared to be a leading indicator of the liabilities of business failures. In the opinion of the National Bureau, since 1948 this series suffered from the same anomalies as

the liabilities series and was not as significant from an economic point of view; therefore, the inverted liabilities series was retained on the full list while the inverted series, the number of large failures, was dropped. We have found that since the early 1950's the series, number of large failures, has not been a useful leading indicator of the series, liabilities of business failures.

To summarize, the magnitude of the increase in the 6-month moving average of liabilities of business failures during the most recent 2 years was nearly unprecedented, and this increase exceeded that associated with the Great Depression. The absence of any indication that this increasing trend has ended has unfavorable implications for the near-future trend of general business activity.

STATISTICAL INDICATORS OF CYCLICAL TRENDS

No further recent data on the primary indicators were received since last week's report.

Apparent cyclical expansion of only one-quarter of the primary leading indicators does not support expectations that general business activity soon will begin to expand cyclically.

SUPPLY

INDUSTRIAL PRODUCTION

Production of steel, automobiles, electric power, and lumber (1) in the 1- and 4-week periods ended on the indicated dates in the current year and (2) in the corresponding periods of earlier years was as follows:

	1929	1932	1957	1961	1969	1970
<i>Steel</i>						
Ingots, etc.—million tons						
1 week: December 26	0.55	0.18	1.37	2.22	2.45	2.26
4 weeks: December 26	3.23	0.87	6.71	8.65	10.71	9.43
<i>Automobiles</i>						
Vehicles—thousands						
1 week: December 26	17	23	79	149	39	93p
4 weeks: December 26	80	75	503	641	583	574p
<i>Electric Power</i>						
Kilowatt-hours—billions						
1 week: December 26	1.6	1.6	12.2	16.6	27.5	29.0
4 weeks: December 26	7.2	6.1	49.5	65.4	114.6	118.1
<i>Lumber</i>						
Board feet—billions						
1 week: December 19	0.74	0.20	0.54	0.54	0.75	n.a.
4 weeks: December 19	2.84	0.80	2.13	2.22	2.70	n.a.

p Preliminary. n. a. Not available.

DEMAND

THE HARWOOD INDEX OF INFLATING

The seasonally adjusted index of inflating decreased 2 points during November to a level about 5 percent less than that a year earlier.

Inflating occurs when either a commercial or a Federal Reserve bank creates purchasing media, not for representing consumable things offered in the markets, but instead for acquiring investment-type assets. Such assets include Government or other securities and loans to borrowers for buying such securities or for buying consumable things that are represented by purchasing media that *already have been created*.

For example, inflating occurs when a commercial bank that has no saved purchasing media available makes a bookkeeping addition to the checking account of a business for use in buying new plant and equipment. Purchasing media *already had been created* for representing the equipment and other things used for building the plant, and these purchasing media had been distributed to those engaged in processing such things. The additional purchasing media created by the bank are inflationary because they are in excess of the amount needed for representing the gold-exchange value of the

equipment and other things offered in the markets.

Deflating occurs when a commercial bank sells investment-type assets or acquires them less rapidly than it receives saved purchasing media through time deposits, capital funds, or other savings-type liabilities. This process reduces the amount of excess or inflationary purchasing media in use.

Investment-type assets of the commercial banking system totaled about \$448 billion late in November, which was nearly \$4 billion more than the revised amount late in October. (This revision reflected the semi-annual incorporation of call date data, which revealed that investment-type assets were somewhat larger during much of 1970 than earlier estimates had indicated.)

Savings-type liabilities increased \$1.7 billion during November to nearly \$313.5 billion. The net result of these changes was an increase of \$2.4 billion in inflationary purchasing media in use to \$137 billion late in November. This amount was relatively unchanged from that a year earlier. The effect of this increase was partly offset by an increase of \$0.7 billion in noninflationary purchasing media during November. (The index is the ratio of total purchasing media in use to the portion that is noninflationary.)

The seasonal increase in investment-type assets, together with the larger-than-usual increase in savings-type liabilities, resulted in less-than-seasonal inflating during November and a small decrease in the adjusted index. This was the second small consecutive monthly decrease in the adjusted index following a large increase during September. (The recent increase in the 3-month moving average of the adjusted index, shown in the accompanying chart, reflects an average during the early fall somewhat greater than that last summer.)

Recent changes in the index reveal that the substantial deflating during the 6 months ended in August did not continue thereafter, but that substantial inflating did not occur during much of the fourth quarter of 1970.

The index has not yet revealed whether the substantial deflating that began early in 1970 has been reversed or merely interrupted.

INVESTMENT-TYPE ASSETS OF THE COMMERCIAL BANKING SYSTEM As of November 25, 1970 (Billions of dollars)

Asset Classification	Amount of Assets	Amount of Change	
		Latest Month	Latest 12 Months
U.S. Government securities	119.1	+2.8	+7.4
Consumption loans	85.5	-0.3	+5.8
Other securities	82.6	+1.6	+11.7
Real estate loans	71.6	+0.1	+0.9
Term loans	40.0	-0.1	+1.0
Speculative inventory loans	16.6	+0.4	+2.3
Security loans	8.2	—	-0.5
All other	24.3	-0.7	+2.4
Gross amount	447.9	+3.8	+31.0

RETAIL SALES

Estimates of retail sales for the most recent week and 4 weeks compare with such sales during the corresponding periods a year earlier as follows:

Period	Percent Change
Week ended December 19	+ 4
Four weeks ended December 19	+ 3

Note: Data for December 26 were not available.

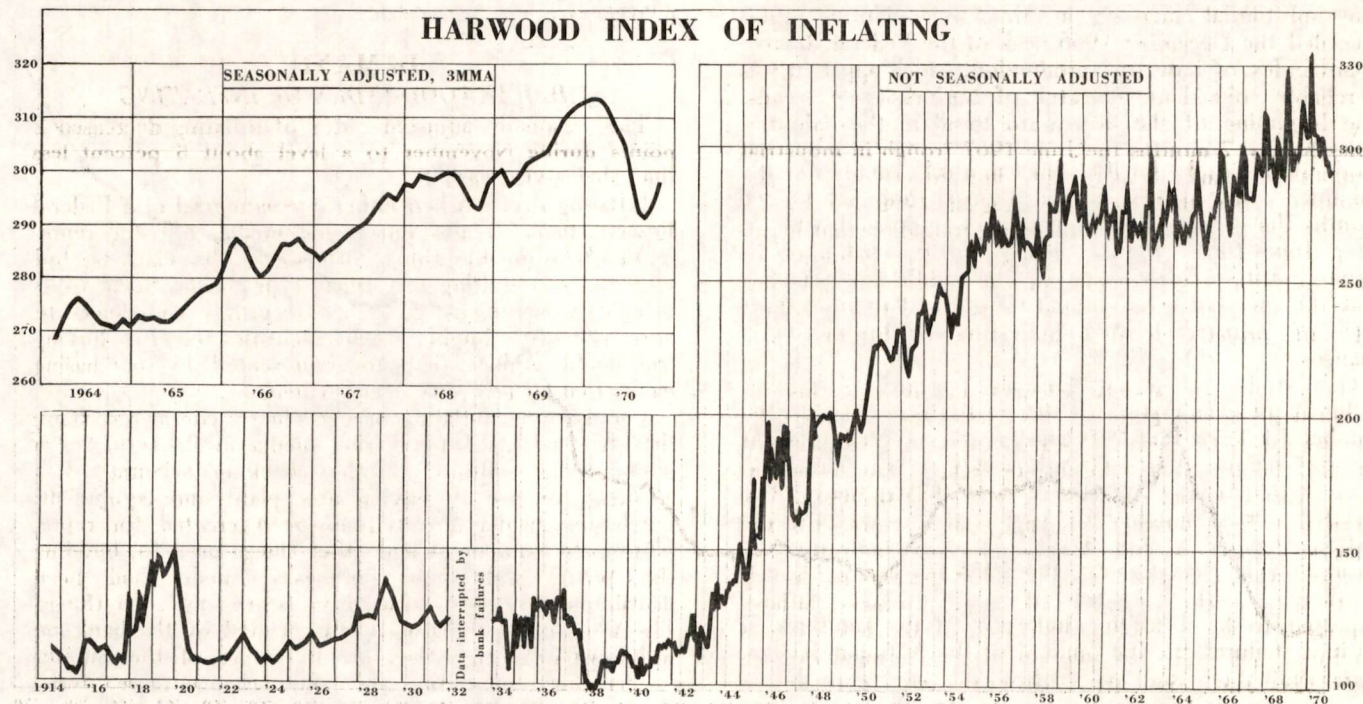
PRICES

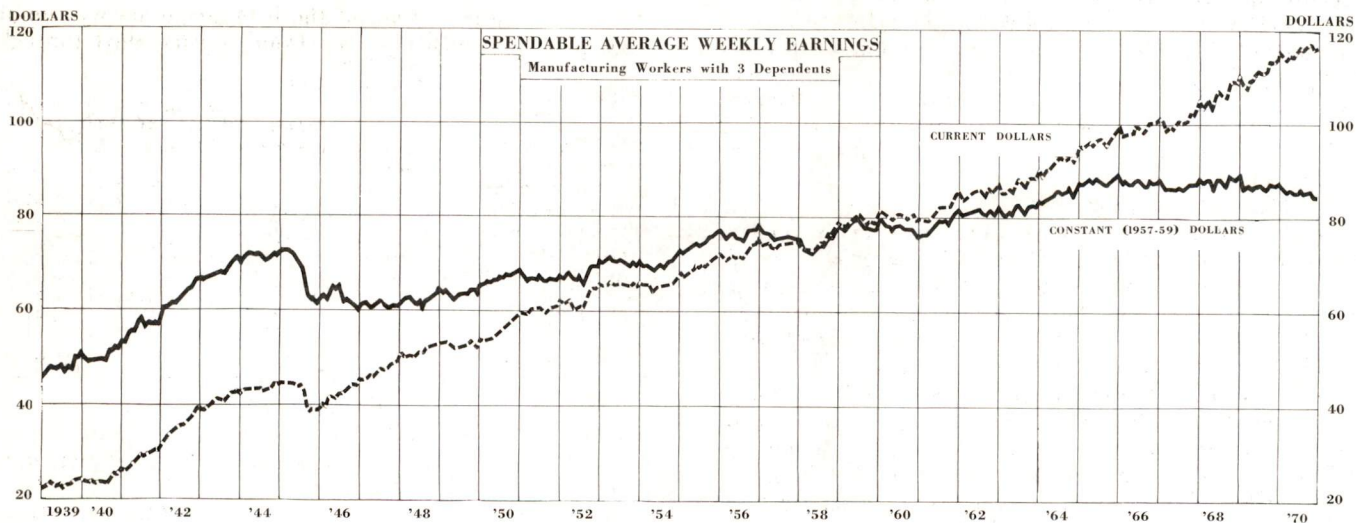
CONSUMER PRICES

The Consumer Price Index before adjustment for seasonal variations increased 0.3 percent during November, according to the latest report of the Labor Department. The November index of 282.8 (1935-39=100), which is equivalent to 137.8 on the 1957-59 base, was 5.6 percent more than that for November 1969. The unadjusted index increased at an annual rate of 3.6 percent during November, in contrast with a 7.2-percent annual rate of increase during October and a 4.8-percent rate during September. The seasonally adjusted index also increased 0.3 percent during November, which was considerably less than the 0.5-percent increase in the adjusted index during September and also during October.

Except for food prices, all other principal components of the unadjusted index increased during November. Percentage changes in these component prices from those a

HARWOOD INDEX OF INFLATING





month and a year earlier, respectively, were as follows: food, -0.5 and +3.4; housing, +0.6 and +7.3; apparel and upkeep, +0.7 and +3.8; transportation, +0.7 and +7.0; and health and recreation, +0.4 and +5.6.

The food price index decreased for the third consecutive month during November to the same level as it was during May. Contraseasonal decreases in fruits and vegetable prices and substantial decreases in beef, pork, and poultry prices accounted for much of the decrease in food prices. Gasoline prices decreased, as did conventional mortgage interest rates. Price increases were reported for residential gas, water, and sewage services, transportation, home repairs, medical care, new car prices, and apparel.

The purchasing power of the consumer dollar during November was only 35.4 percent of that during the 1935-39 period.

Early in 1970 Administration economists predicted that the average Consumer Price Index for 1970 would exceed that for 1969 by 4 percent. Recently they revised this estimate upward to slightly less than 5 percent, which

would be somewhat less than the 5.4-percent increase from 1968 to 1969.

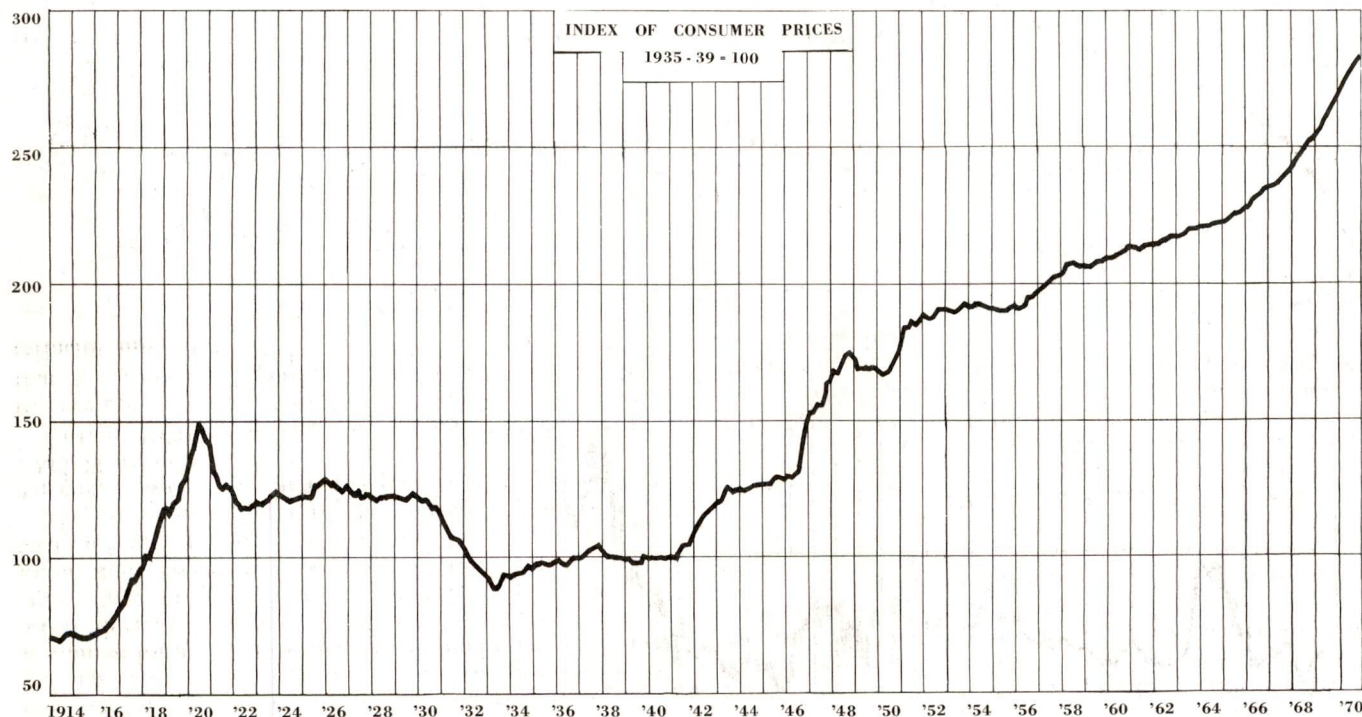
During the past 6 years the spendable weekly earnings of a manufacturing worker with three dependents have increased approximately 26 percent. However, such earnings expressed in constant dollars are no greater than they were 6 years ago, largely as a result of the marked increase in consumer prices that has occurred. Such a worker obviously has made little progress during recent years in increasing the exchange value of his spendable earnings.

Further substantial increases in the Consumer Price Index seem probable during the next few months.

COMMODITY PRICES

Index	1969		1970	
	Dec. 21	Dec. 14	Dec. 21	
Spot-market, 22 commodities*	299	281	280	
Commodity-futures	294	301	303	
Steel-scrap	\$35.16	\$35.50	\$37.18	

*For the preceding Tuesday.



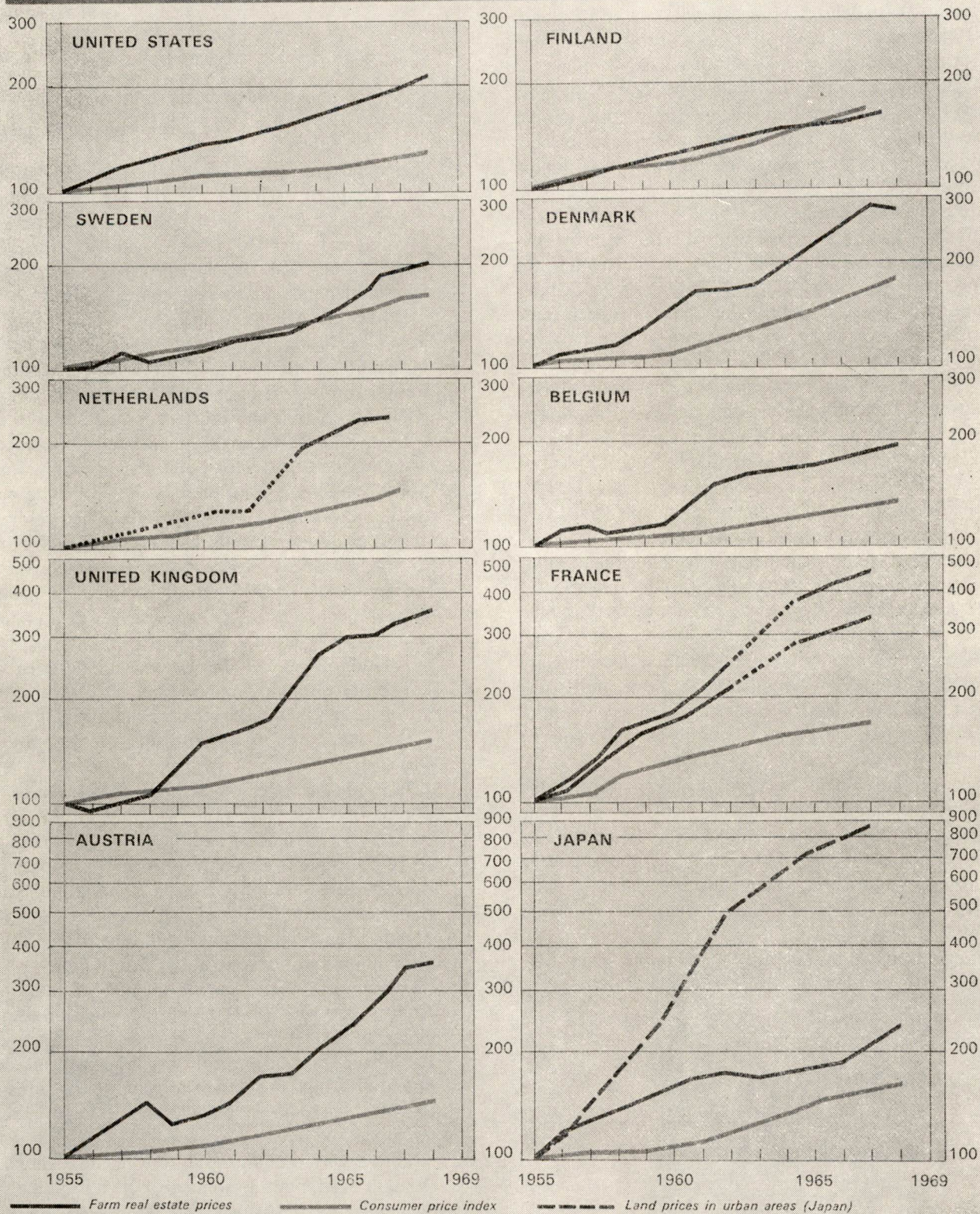
How to spot crisis?

When CPI rises and land prices don't. This shows high i --- need high i .

Unfortunately most indices of land price are skewed - not good enough, witness U.S. Cl, 1920.

OECD Ag. Comm., "Cap. & Ince. in Ag.", summarized in
 OECD Observer, 10-70

C. PRICE INDICES OF FARM REAL ESTATE AND CONSUMER PRICE INDICES



United States : Market prices for arable land with service buildings and dwellings.
 Finland : Arable land and buildings, including dwellings.
 Denmark : Weighted averages of the prices of the three size groups, 1-5, 5-10 and 10-100 ha., open market transactions, including

dwellings.
 Belgium : Land for farm use and horticulture, excluding buildings.
 France : (1) Arable land, plots of 1 ha. and over, vacant possession.
 (2) Permanent grassland, plots of 1 ha. and over, vacant possession.
 Austria : Average price of farmland.

OFFICIALLY LAUNCHED by the Communist Party of India at Hyderabad on 13 July 1970, the "Land-Grab Movement" is still gathering momentum. To date there have been large scale occupations of lands in Assam, West Bengal, Bihar, Kerala, Andhra Pradesh and Rajasthan. The failure after many years to put an end to absentee landlordism by legal measures has brought the CPI nationwide support for land grab. The Delhi State Youth Federation for example called for forcible occupations of lands, many of which were government owned, as well as those belonging to rich landlords and monopoly houses. Agitators up and down the country working in sympathy with the movement have conducted demonstrations and hunger strikes, while a series of encroachments have been made onto tracts of forest land, tea estates, and the "surplus" lands belonging to ex-rajahs and the like. Sometimes the take-overs have been quite peaceful affairs though more often they have involved some violence.

Land grabbing has been going on spasmodically for some four years but these recent moves have aroused interest at all levels. It has been even said that this year the Communist Party has so dramatised the problem of economic poverty that it has made the question of land a national issue. In all, some ten million people have taken part in one form or another in the agitation.

Press reports on local activities give colourful accounts of what is taking place: "The police (in Madras) arrested 2,648 Communists when it was announced that land would be forcibly occupied . . ." and in another area: "hundreds of Communist workers arrested in a midnight swoop." At Cuttack—"about 500,000 acres, most of it Government fallow land, occupied by landless peasants," and in Rajasthan, "armed gangs grab 60,000 bighas of Government land." And so it continues.

There can be little doubt suggests one reporter that the Naxalities (Maoist Communists) "have shocked the conscience of the nation into awareness of one of the more serious problems of our time . . . have built a disturbing political movement on the basis of land hunger and in doing so, have revealed its political potential."

Some officials, in Tamil Nadu for example, claim they are quite prepared to hand over surplus land to the land-



less in an orderly and constitutional way but will not tolerate violence. The Communists, however, reject these assurances. They have waited long enough, they say, for legislation and are determined to carry through

LAND GRAB IN INDIA

Julia Bastian

"Who are the most deserving of the land should be given to whom?"

their land grab activities at all costs. The Land Ceiling Act, designed to dispossess the big landlords of their "surplus" land has already proved a farce. Even a land ceiling can be drafted in such legalistic terms, the Communists point out, that families may hold thousands of acres under such guises as "benami holdings."

While the Ministers and their advisors are arguing about a solution, public meetings have been banned and in some districts the police have been strengthened by bringing in hundreds of men from surrounding areas to protect croplands and other properties.

Even before independence, land reform was recognised as being the corner stone of India's economic regeneration. Yet despite constant pressure from many quarters the Government has consistently avoided reform, probably because most political support comes from the well-to-do-landowners. Neither the economic nor the humanitarian aspects of land reform have so far persuaded the Government to throw out what is clearly an ancient but iniquitous system of land tenure.

A landholding in India, however modest, ensures not only a home and a livelihood but also social status. The lot of the landless labourer becomes all the more desperate in a community where other sections are moving forward.

In 1960-61 it was estimated that 52 per cent of the rural population were living at "poverty level." By 1967-8 the poverty line had moved up to 78 per cent. According to 1969 estimates, out of a total rural population of 434 millions, 103 millions own no land at all while 135 millions operate less than five acres per family. Taken together these represent 67 per cent of the total rural population and of these, about 210 millions live near to starvation on a per capita income of less than 200 Rupees per year (£11). And the situation is growing worse.

Yet the proportion of idle land with agricultural potential is high in relation to geographical area—about one-fifth of India is uncultivated though much of it might well be put to good use.

This is why the land grab movement is moving from strength to strength. In some districts it is taking the form of small rural festivals. In West Bengal, for example, hundreds of landless countryfolk thronged the headquarters of the Peasant Action Committee. Wielding sticks and spears and led by volunteers in jaunty red caps, they formed up into gay processions, some beating

1-21

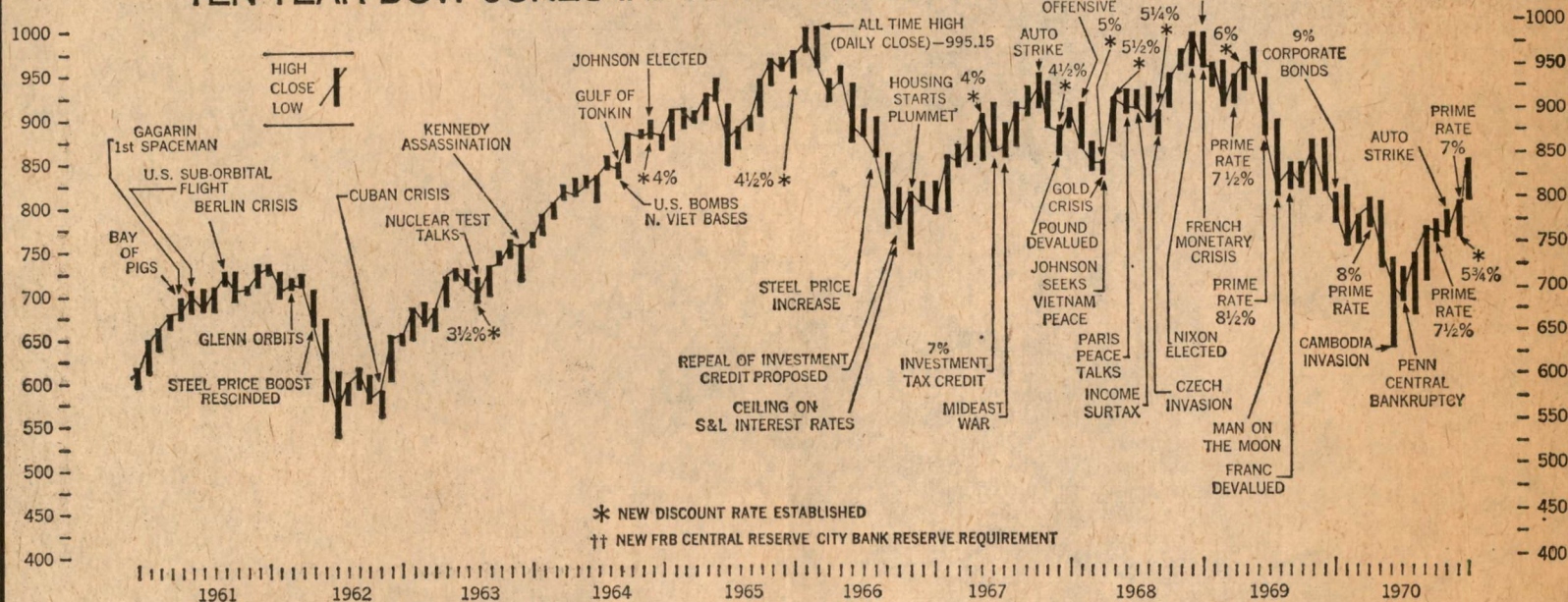
ΔM lowers i , yet adds to expn. of infln.

Thus doubly encourages borrowing.

And doubly lowers real i . Yet this is disequilibrating,

there must be a reaction.

TEN YEAR DOW-JONES INDUSTRIAL AVERAGE



DECEMBER 1970

Dean Witter and Co. Incorporated Research Department

Evidence of cap. shortage: fall of equity values.

All time high: 1966, spring.

Secondary high: 1969, spring

1970 mean: about 750 DJ, or 25% down from 1966 max.

Stranded comply. invs. -- threat of crisis, etc.

shoot the price, plus costs to complete, up past \$750-million.

Despite such additional costs, there is general agreement outside the U. S. that this country will build an SST. "The U. S. Senate has taken the U. S. out of competition in the supersonic transport business for the moment," says a leading West German industrialist. "But I don't think an American SST is dead . . . only delayed." In Japan, a similar mood prevails. And Britain and France, who are building the Concorde SST, also doubt that the U. S. will stay out of the competition for long.

Reverberations. Meantime, there are at least two changes in plans for the Concorde. A meeting scheduled this week between British Minister of Aviation Supply Frederick Corfield and French Minister of Transport Jean Chamant, for a "major review" of the whole Concorde program, was postponed until Apr. 22. At this meeting, a decision will be made on whether the Concorde's manufacturers, British Aircraft Corp. and Société Nationale Industrielle Aérospatiale, will get the go-ahead to build four more planes.

The French and British have also arranged to extend for another six months—until next Sept. 30—the option expiration date of 16 airlines that have signed to buy the aircraft. "The air-

Will the SST's critics be able to bar all supersonic transports from U. S. soil?

lines don't really want to talk about Concorde now," says one observer.

Threat. The threat now is that the surge of opinion that buried the SST will sweep on to prevent all supersonic transports from landing on U. S. soil.

Henri Ziegler, president of SNIAS, admits some apprehension about such a possibility. But BAC sees the only practical way of banning the plane as being through noise regulation. "And if the U. S. attaches numbers [to the noise regulations] that prohibit Concorde, they attach numbers that prohibit the 747," says a BAC spokesman. "So, they won't do it."

Another ominous cloud hangs over the Concorde, however. One of its key buyers, British Overseas Airways Corp., is in financial troubles. BOAC's pretax earnings, according to Chairman Keith Granville, have nosedived during the current fiscal year to less than \$12-million (from \$74.4-million in 1969-70), and the company "faces a potentially difficult cash problem in the coming fiscal year."

BOAC will still go supersonic "if the economics are right," according to Granville. But it's just such potential problems with the airlines that scare all financial backers. ■

TRAVEL

A chill wind nips island hotels

Usually the trade winds temper the subtropical sun just enough to make the Bahamas and the Caribbean isles favorite winter havens for flocks of U. S. spenders. This year, an economic chill has fallen, and there is trouble in paradise.

Belt-tightening on the mainland, cutbacks in service by money-pressed airlines, and the weight of financial arrangements arrived at in the heady optimism of booming tourist years just past have made it a sunless winter for a number of hotel and resort operators. Their woes are compounded by a flood of new rooms on the market, including those quietly rented out by owners of newly built condominiums. Some proprietors are curtailing operations, others have shut down altogether, and at least one last week took its problems to bankruptcy court.

In filing under Chapter 11, Executive House, Inc., of Chicago, said it could no longer carry the load imposed by the 22-year operating lease it holds on San Juan's Condado Beach Hotel. Malcolm M. Gaynor, counsel for Executive House, is seeking relief from terms that now make no allowance for soaring operating costs and a fall-off in business.

The Condado Beach has had both this year, and Gaynor says that "the result has been heavy operating losses and a major cash drain." The action, he notes, does not affect two other hotels which are operated in Puerto Rico by Executive House subsidiaries.

Foreclosure. Another Puerto Rican hotelier, Rene Aponte of Corporación Hotelera, who owns the San Jeronimo Hilton, faces a foreclosure sale on Apr. 12, forced by his primary mortgage holder, Chase Manhattan Bank. Meanwhile, Hilton International Co., the Trans World Airlines subsidiary, has

agreed to continue operating the San Jeronimo at least through May 29, unless a new owner decides differently.

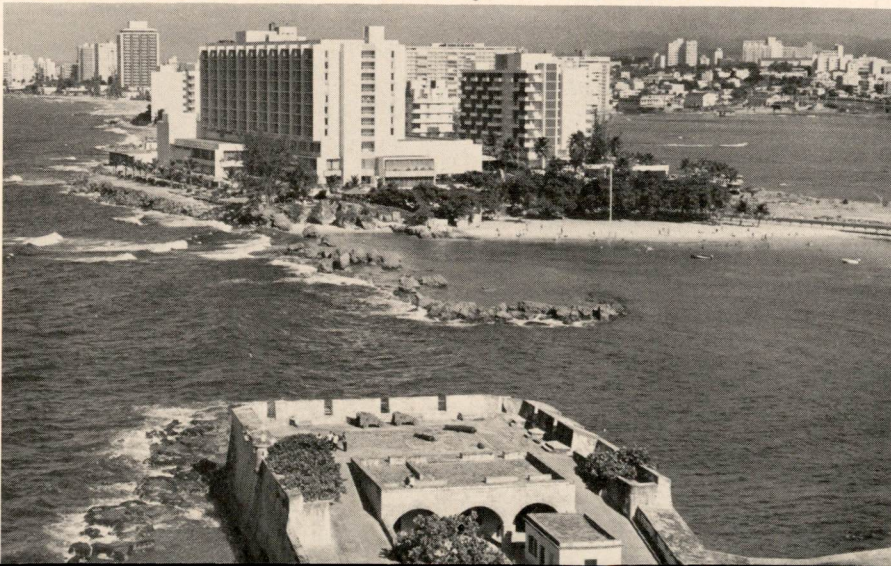
Hilton International itself maintains that business has generally been as good or better than last year at most of its other Caribbean properties. "In fact," says a spokesman, "the Caribe Hilton in February had its best month, on record, from a revenue standpoint."

The Caribe Hilton's performance stands in stark contrast to many of its neighbors. The Hotel Miramar, for one, has found its lack of a beachfront too great a handicap this year and has been closed throughout the 1970-71 winter season. Others are considering shuttering when the last winter visitors leave, rather than weather what promises to be a really "off" season.

Shutdowns. To the north, hotel and casino operators on Grand Bahama Island, already dispirited by a sluggish season, were further depressed this week by two developments. First, Pan American World Airways, facing financial troubles of its own, announced it is discontinuing service on Apr. 25 between Freeport and Miami, chief take-off point for Grand Bahama visitors. Second, the \$7.5-million International Hotel, which opened just last December, closed on Monday.

The hotel, owned by multimillionaire D. K. Ludwig, is being operated under a 20-year lease by Morris (Meyer) Lansky, the Miami Beach hotelman now under federal indictment in connection with an alleged plot to "skim" \$14-million from a Las Vegas casino. Spokesmen for the management group note that two other of its hotels will remain open, and denies the closing has anything to do with the indictment. "This is purely a good business move," says one. "The International will open again when business warrants it." ■

The San Jeronimo Hilton (across inlet) is set to go on the block next month.



More pay for these executives in 1970...

	1970 salary*	Other payments	1969 salary*	Other payments
American Brands, Inc.				
Robert B. Walker, chmn.	\$301,047	\$173,097	\$273,414	\$123,415
American Electric Power Co.				
Donald C. Cook, chmn.	231,785	16,376	206,210	10,474
American Motors Corp.				
Roy D. Chapin Jr., chmn.	152,328	2,000 shares	126,634	1,500 shares
Atlantic Richfield Co.				
Thornton F. Bradshaw, pres.	300,872	6,000	211,602	5,500
Caterpillar Tractor Co.				
William Blackie, chmn.	237,500	—	217,500	—
Dow Chemical Co.				
Herbert D. Doan, pres.	247,235	—	227,630	—
Gulf & Western Industries, Inc.				
Charles G. Bluhdorn, chmn.	251,933	96,082	166,200	2,338
International Harvester Co.				
Harry O. Bercher, chmn.	250,000	—	219,186	—
Johnson & Johnson				
Phillip B. Hofmann, chmn.	302,409	367,584	287,272	289,111
Kraftco Corp.				
Gordon Edwards, chmn.	286,088	—	200,000	1,500 shares
Litton Industries, Inc.				
Charles B. Thornton, chmn.	167,300	—	150,000	—
National Biscuit Co.				
Lee S. Bickmore, chmn.	200,000	48,422	187,500	6,226
Standard Oil Co. (Calif.)				
Otto N. Miller, chmn.	250,000	19,912	225,000	18,534

... about the same for these ...

Chrysler Corp.				
Lynn A. Townsend, chmn.	\$200,000	\$ 10,000	\$200,000	\$ 10,000
E. I. du Pont de Nemours & Co.				
Charles B. McCoy, pres.	193,000	173,655	193,200	182,761
Monsanto Co.				
Edward J. Bock, pres.	150,000	—	146,250	—
Trans World Airlines, Inc.				
Charles C. Tillinghast, Jr., chmn.	100,000	25,000	100,000	25,000
Union Carbide Corp.				
Birny Mason, Jr., chmn.	285,000	66,000	285,000	66,000
U.S. Steel Corp.				
Edwin H. Gott, chmn.	300,000	12,000	297,919	11,917

... and less pay for these

Avco Corp.				
Kendrick R. Wilson, Jr., chmn.	\$130,000	—	\$250,000	—
General Electric Co.				
Fred J. Borch, chmn.	242,509	1,252 shares	274,990	1,389 shares
International Business Machines Corp.				
Thomas J. Watson, Jr., chmn.	150,000	263,735	150,000	282,018
Olin Corp.				
Gordon Grand, pres.	175,000	—	175,000	50,000
PPG Industries, Inc.				
Robinson F. Barker, chmn.	130,000	—	183,750	21,240
Westinghouse Electric Corp.				
Donald C. Burnham, chmn.	236,748	72,000	238,992	156,000
Weyerhaeuser Co.				
George H. Weyerhaeuser, pres.	215,000	—	270,000	—

*Salary in some cases includes other direct remuneration such as bonuses and deferred compensation

EXECUTIVE SUITE

The pay pendulum swings toward cash

Pay for top executives in large U. S. corporations inched ahead during 1970, but, suitably for a recession period, it was the smallest annual increase in three years. A BUSINESS WEEK sampling of 40 proxy statements indicates that, while salaries moved ahead 4.1%, total compensation increased only 2%.

The differential suggests that more executives may be favoring cash, rather than deferred compensation schemes, because of the 1969 Tax Reform Act. In addition, many companies simply did not make bonus or incentive payments last year.

In perspective, the executives may have fared well—corporate profits were down in 1970 by almost 12%. But pay for executives did not keep pace with inflation. The Consumer Price Index rose 5.5% from December, 1969, to December, 1970. And while the Commerce Dept. reports that wages and salaries over-all climbed 6.1%, business and professional income grew only 1.8%.

A handful of executives drew in handsome salary increases. Gordon Edwards, chairman of Kraftco Corp., got a 43% boost to \$286,088, but his total compensation was up only 9.2%. American Motors Chairman Roy D. Chapin, Jr., took an increase of 20.3% to \$152,328, while Atlantic Richfield Co.'s President Thornton F. Bradshaw rated a 42.2% increase to \$300,872.

The winner. But it was Charles G. Bluhdorn, chairman of Gulf & Western Industries, Inc., who was the big percentage gainer. His salary jumped more than \$85,000 for a 51.6% increase, and his total compensation more than doubled. The reason: Bluhdorn had taken part of his pay in past years in restricted warrants, and during 1970, a portion of the restrictions was lifted.

But a number of top executives took steep pay cuts. Robinson F. Barker, chairman of PPG Industries, Inc., had his salary decreased by 29%. And George H. Weyerhaeuser, president of Weyerhaeuser Co., took a cut of 20.4% for 1970. The big percentage loser was Avco Corp. Chairman Kendrick R. Wilson, Jr., whose salary fell from \$250,000 to \$130,000. In 1968, he made \$275,000.

Among top executives whose salary remained the same is Birny Mason, Jr., chairman of Union Carbide Corp. But that is nothing new for Mason. His total pay package has been \$285,000, with \$66,000 in incentive compensation, since 1966.

Index to cap. shortage.

Stumpage price is a very sensitive indicator?
Not as sensitive as forest l.v. These are doubly leveraged.
Extreme.

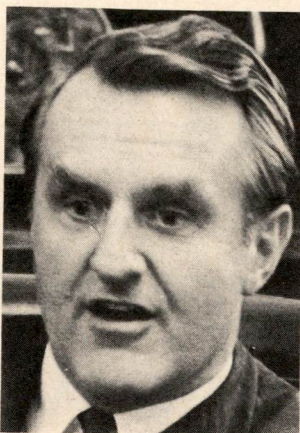
The quality of credit is strained

Penn Central and Lockheed have shaken bankers' faith in the standards they apply

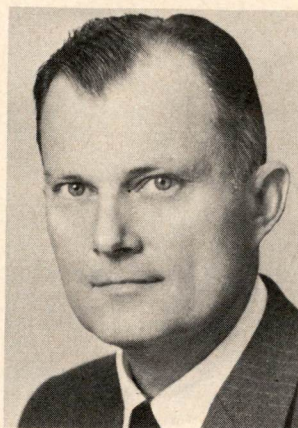
Something very strange happened to the nation's commercial banks on their way through the booming 1960s: Loan standards became dangerously disheveled.

Now, in the somber 1970s, the banks are reaping the harvest. "The trend of the loss experience of the banks has been terrible," says Chairman William Renchard of Chemical Bank of New York. As a consequence, bank earnings have come under substantial pressure and banks are fighting to hold down expenses as they have not done in years. One reason bankers have been so eager to hike their prime lending rate is because earnings have come under such pressure. And the errors that the bankers made in the 1960s may haunt them for many years to come. Vice-Chairman Frederick Heldring of Philadelphia National Bank warns that the 1970s may yet be called the "decade of defaults."

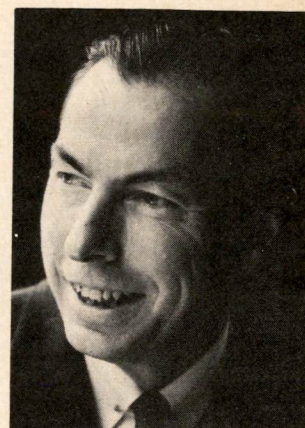
The final verdict is not in, of course. Billions of dollars in bank loans and lease agreements ride now on what



Heldring: The 1970s may be "the decade of defaults."



Medberry: "Banks could lose a lot of money."



Wriston: four times the original loss estimate.

happens to Lockheed Aircraft Corp. and to all the suppliers and the airlines that one way or another are tied to the aerospace giant. And there are other trouble spots as well (box).

The banking system does seem to have escaped disaster in its loans to Ling-Temco-Vought, Inc., the financially distressed conglomerate. Where LTV was once in hock to its banks for nearly \$350-million, that debt has now been worked down to around \$50-million, and the banks may escape with no loss whatsoever. But the banks have

staked aircraft manufacturers to more than \$3-billion in loans, beyond the loan to Lockheed. And the airlines, which have been losing money at a prodigious rate lately, are into the banks for some \$4.5-billion, including both loans and agreements by which airlines lease aircraft from the banks. In brief, the banking system has advanced more than \$8-billion to two closely related industries where financial good health today is the exception rather than the rule.

There really is not much danger that

Airlines and aerospace: the debt load factor

Lockheed's \$400-million line of credit from 24 banks is stealing the headlines, but it is only the tip of the iceberg in the banking system's commitment to the aerospace and airline industries. Most of the seven banks that put up \$30-million each (table, page 72) are also involved in lines of credit to Lockheed's major subcontractors on the L-1011 TriStar: Avco Corp., \$329-million; Sperry Rand Corp., \$125-million; Collins Radio Co., \$104-million. The stake of these subcontractors is not limited to the TriStar. Avco is also a sub for Lockheed's C-5A military cargo plane, Sperry Rand for its S-3A antisubmarine plane, and Collins for both aircraft.

The banks are also creditors of the airlines that have ordered the TriStar (table). Among Eastern's major lenders are Chase, \$55-million; First National City, \$33-million; Bankers Trust, \$10-million, and Morgan Guaranty, \$9-million. Trans

World Airlines also has Morgan Guaranty as a major creditor, with \$39-million, and another of Lockheed's creditors, Irving Trust, with \$100-million. Delta, the third major purchaser of the TriStar has among its creditors First National City and Manufacturers Hanover, with \$37-million each; Bank of America, \$16-million, and Morgan Guaranty, \$9-million.

Beyond this involvement, Chase as a trustee holds 6.4% of TWA's common stock, and Continental Illinois National Bank, another Lockheed creditor, to the tune of \$23-million, holds 5.2%. Chase also holds stock in other trunk airlines.

Spreading effect. If the L-1011 subcontractors should lose their \$350-million investment in the program, their difficulty in carrying out other contracts in the face of such a blow might have further repercussions. Their current financial strength varies considerably, but all three

major subs are in debt to the same banks as Lockheed.

Avco is well in the black, but its corporate backlog dropped sharply from \$927-million to \$709-million in the year ended last Nov. 30, and first-quarter sales were off 3%. Both sales and earnings are off at Sperry Rand, but the company is still comfortably in the black. On the other hand, Collins Radio is in dire straits even without a potential TriStar loss. Running in the red and with its bank credit lines almost exhausted, it has had to give North American Rockwell Corp. a majority position on its board and the right to acquire more than 50% of its stock.

Among the airlines also financed by the same banks as Lockheed, TWA suffered a \$64-million loss last year and could ill afford to lose its \$110-million investment so far in 33 TriStars. Eastern eked out a \$5-million profit last year; it has a \$75-million stake in the TriStar. Delta is an exception among trunk airlines with its \$41-million profit last year; it has

If your corporate cash is working hard for everybody but you, consider Morgan Guaranty

Consider, for example, the economic facts of life. Persistent inflation, fluctuating money rates, an unsettled business environment, the complicated tax picture, all sharply point up the critical importance of sound cash management. Now is the time to see if your cash-control system is really efficient—or is even a system. Find out if your money is working for you or moonlighting for another company.

Morgan Guaranty can help. To a greater extent than other major U.S. banks, Morgan concentrates on corporate banking. At your request, our specialists in corporate cash management will undertake a complete, objective examination of your cash-control procedures, from receivables to payables. Then they'll provide innovative ways to adjust your float, make your money work full time for you.

If your company operates multina-



tionally—with cash resources widely dispersed, denominated in different currencies, and subject to a patchwork of regulations—your problems are more complex. Here Morgan specialists in international money management can design an integrated program, country-to-country, specially tailored to help your company get its money's worth.

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Morgan Guaranty - the corporate bank

a big bank will fail, come what may. The Federal Reserve showed how quickly and decisively it can pump funds into the banking system when the Penn Central Transportation Co. went under, precisely one year ago. And yet the experience of the past two years has seared the memories of bankers, as the Great Depression traumatized an earlier generation of bankers. No matter how much money the Fed makes available, it will be a long time before the bankers again dole out money the way they did in 1968 and 1969 when it seemed that the boom would go on forever. "The chickens," says Heldring of Philadelphia National, "are coming home to roost."

The loss trend. New York bank stock dealer M. A. Schapiro & Co. estimates that loan losses in 1970, mostly because of the Penn Central debacle, were the heaviest for any single year since the 1930s. The 10 members of the New York Clearing House Assn. ran aggregate net loan charge-offs of \$191.5-million. And the *New York Times* made an interesting document public this week: an internal message to senior officers

from Chairman Walter Wriston of First National City Bank of New York. Citibank was the Penn Central's lead bank and, in the message, Wriston concedes that the bank last year had to revise "our net loss estimate upwards to \$47.7-million, or more than four times as much as originally anticipated."

The trend has continued in 1971. Chase Manhattan Bank of New York has revealed that it wrote off \$19.9-million in loans in the first quarter of this year. That compares with only \$1.8-million in the first quarter of 1970 and an average quarterly rate of less than \$15-million for all of 1970. The New York bank stock firm of Keefe, Bruyette & Woods, Inc., figures that loan losses for the nation's big banks as a group were 106% higher in the first quarter of 1971 than a year earlier—after an 80% jump in 1970.

And now, on top of the Penn Central and some less well-publicized corporate failures, the bankers have the Lockheed situation to worry about. It is a gargantuan worry.

Lockheed crisis. Twenty-four banks have lent Lockheed a total of \$400-mil-

lion so it can build the L-1011 TriStar airbus. And the banking system has lent a good deal of money to the 35,000 companies that supply parts and material to Lockheed; if Lockheed should collapse, at least some of those suppliers would undoubtedly follow. Moreover, a number of airlines have borrowed money to finance purchases of the airbus when it finally rolls off the production line, and that money could be lost if Lockheed goes under. In short, if anything happens to Lockheed, the ultimate loss to the banking system could be staggering.

Some of the \$400-million that the banks have lent to Lockheed is collateralized. But U.S. Treasury officials, who are now trying to persuade Congress to guarantee a further \$250-million in bank credit to Lockheed, say that if the existing bank debt must be written off, the collateral is likely to realize only a shade over \$100-million for the lenders. Chairman C. J. Medberry of Bank of America, one of the lead banks in the Lockheed lending group, says simply: "Banks would lose a lot of money."

Obviously, bankers don't like the idea of losing so much money. Neither do they like what the Lockheed mess has done to their image. No matter what happens to Lockheed, the bankers involved won't come out of it looking very good. "I can understand bankers lending to Penn Central," says a man at one of the Washington regulatory agencies. "It was one part of the establishment lending to another. But I am

The banks' stake in aerospace and airlines

Biggest lenders to the aerospace industry

Bank	Estimated loans Millions of dollars
Chase Manhattan	\$189
Manufacturers Hanover	148
Bank of America	143
First National City [New York]	142
Bankers Trust	97
Morgan Guarantee	94
First National of Chicago	77
Chemical Bank & Trust	69
Security Pacific	66
Mellon National	64

Data: Aerospace Daily

Biggest lenders to the airlines

Bank	Estimated loans Millions of dollars
Chase Manhattan	\$367
Bank of America	324
Bankers Trust	281
First National City [New York]	170
Morgan Guarantee	164
Irving Trust	132
Chemical Bank & Trust	97
Manufacturers Hanover	82
Continental Illinois	66
United of California	50

Data: Civil Aeronautics Board

\$36-million tied up in the Lockheed airbus.

Broad credit demand. The reliance on credit by Lockheed and its customers and major subcontractors is by no means exceptional. The banks are also financing other aerospace companies, mainly for work on such new airliners as the McDonnell Douglas DC-10 and the Boeing 747. An analysis of 19 aerospace manufacturers by *Aerospace Daily*, the industry newsletter, finds \$4-billion in credit agreements outstanding. That is a 55% rise from two years ago.

According to this analysis, McDonnell Douglas has a \$650-mil-

lion credit line: \$400-million for the corporation as a whole, \$200-million for its financing subsidiary to help customers buy or lease planes, and \$50-million for Douglas Aircraft, Ltd., of Canada. United Aircraft Corp. has a \$490-million credit line, and Boeing Co. has \$471-million, including \$262-million for its financing subsidiary.

Other credit lines cited by *Aerospace Daily*: General Dynamics Corp., \$260-million; Northrop Corp., \$250-million; Litton Industries, \$225-million; and North American Rockwell, \$195-million.

The survey finds that the aerospace industry relies chiefly on the

major New York banks, though California banks such as Bank of America, Security Pacific National, United California Bank, and Wells Fargo are also among the top lenders. Outside New York and California, the largest lender is First National of Chicago.

Records of the Civil Aeronautics Board show the extent to which the same major banks finance the airlines, too. Out of \$2-billion in airline borrowings, Chase supplied 16.7%, Bank of America 14.7%, Bankers Trust 12.8%, First National City 7.7%, and Morgan Guaranty 7.5%.

The banks are also heavily involved in a relatively new finance technique of airlines: leasing aircraft instead of buying them. In 1960, only 4% of planes operated by trunk airlines were on lease; last year 19% were leased, with a dollar value of \$2.5-billion. The no-money-down lease arrangement enables the industry to put new planes into operation despite shaky financial conditions.

amazed at the way banks put money into Lockheed."

For one thing, Lockheed had been out of the civilian plane market for a decade, ever since it lost millions on its Electra. It decided to produce the airbus despite predictions by Senior Vice-President Blaine Cook of Trans World Airlines, among others, that introduction of such a plane before the market was ready could bankrupt some airlines. Finally, it became clear very early in the game that rival McDonnell Douglas would have its DC-10 airbus out long before Lockheed could produce the TriStar.

Looking for trouble. Worse still, it appears that when the 24 banks agreed in May, 1969, to extend Lockheed money for the 1011, they already knew that

odds are barely 50-50 that it will—the bankers insist that they will lay out no more money for Lockheed. One problem is that the only significant collateral that Lockheed could offer would be its missile division. And, sighs Medberry of Bank of America, what could the banks do with that but sell it to the U. S. government?

Fodder for Nader. While the Lockheed experience is giving bankers the shivers, it is serving as a textbook case for the charges that consumer crusader Ralph Nader's study group made against banks this week in a prickly report on First National City Bank, one of the 24 Lockheed lenders.

It is the basic Nader thesis that a decline in profit margins—in Citibank's case from 20¢ on the dollar in 1964 to 9¢ in 1970—has forced the large banks to press for increased volume. This in turn has provided "a strong incentive to strengthen ties with the largest and fastest-growing corporations." By so doing, the banks could accelerate the growth in balances on deposit, the basis of their most profitable activity: lending. Until the Penn Central trouble, the report adds, banks had "a tendency to equate size with strength and over-all creditworthiness."

As for the decision to lend to Lockheed in 1969, Nader's analysis is that the TriStar and its fellow jumbo jets were pushed through because "the giant aircraft companies needed a new outlet for their technology and enormous productive capacity." Lockheed's problems had reached an advanced stage when the banks forked over the \$400-million, the report says, so "either [the banks] did not analyze Lockheed's economic situation very carefully or were depending on the taxpayers . . . to protect their loans."

The excesses of the 1960s went beyond Lockheed and the Penn Central, of course. Bank money financed many of the mergers and takeovers that enabled the conglomerate corporations to grow so rapidly. Bank money helped finance the wildest bull market in the history of Wall Street. Bank money helped finance such super growth industries of the 1960s as computer leasing and nursing homes. Chase Manhattan Bank even lost money in loans to another banking venture—the Parsons group of banks in Michigan. That group, organized by Donald Parsons, got into a financial bind last year.

Mistakes. Of course, to indict the banks' lending judgement at this late date takes advantage of hindsight and ignores the intervening recession and its

strains upon the creditworthiness of a great many borrowers. "It is a matter of the business cycle," one federal bank regulator assures. "I have no feeling that a lowering of credit standards is a generalized thing."

But the impression remains that the banks' handling of the Lockheed affair and similar transactions was much too casual until the liquidity crisis of mid-1970 chilled the financial community. In fact, some bankers put their finger on some of the same problems that the Nader team singled out: "the overriding desire to maintain deposit relationships, and excessive reliance on credit analysis by other banks."

Heldring of Philadelphia National sees two basic mistakes: lending on too little knowledge and lending short-

'We were awed by its size. We should have had more information'

term for long-range projects. His bank participated in the Lockheed loan to the tune of \$8-million because it was a correspondent of Bankers Trust Co. of New York, one of the lead banks in the Lockheed lending group. It left the economic analysis to the lead banks and now wishes it hadn't.

Penn Central. Bankers find it easier to talk about Penn Central than Lockheed, but the loans to the railroad betrayed the same pattern. Charles Woodruff, executive vice-president of Manufacturers Hanover Trust Co. of New York, recalls the lament of a banker from a smaller institution that had made a \$1.5-million loan to the railroad "on the recommendation of the big fellows from New York." Says Woodruff, "The banker said he had to lend the money because he had big balances from Penn Central, and I told him not to be swayed by balances."

Looking back at Penn Central now, Woodruff feels: "We were awed by its size. We should have had more information about the company. But I've heard that Penn Central financial people were adroit in avoiding giving information."

Some government banking officials put it more bluntly: Penn Central's financial data were "fabricated, and bank credit groups just didn't pick it up until too late."

Some bankers have a "there, but for the grace of God, go I" feeling about Penn Central. Says a senior executive of one of New York's six largest banks, "We had a less difficult time than others did because a real smart young vice-president here spotted trouble. We gave them no unsecured loans, even though [Paul] Gorman"—Penn Central's last chairman—"was a member of our board."

Common sense saved Patrick Clif-

Who's lending money for the Lockheed Tristar

Creditors*	Amount lent Millions of dollars
Bank of America, Bankers Trust, Chase Manhattan, First National City [New York], Manufacturers Hanover, Morgan Guarantee, Security Pacific	\$210
Crocker-Citizens, First National of Boston, First National of Chicago, Irving Trust, Wells Fargo	75
Continental Illinois, Mellon National	46
Chemical Bank, United of California	40
Girard Trust, Philadelphia National	16
Citizens & Southern, First National of Atlanta, Trust Co. of Georgia	6
Bank of California	5
Fulton National, Pacific National of Washington	2

Data: BW; * In each group, creditors hold equal shares

the company had secured its big government contract for the C-5A military transport by submitting a below-cost bid and that Lockheed could expect to run into trouble with the government. But neither the C-5A cost overruns nor the news that the Pentagon had just canceled a production contract for Lockheed's Cheyenne helicopter kept the banks from going ahead. Not until the fall of 1970, long after Lockheed's problems became public knowledge, did the banks attempt to collateralize any part of the loan.

Ultimately, the collapse of Rolls-Royce, the British outfit that was to supply the engines for the 1011, forced the banks to ask Washington to stand good for an additional \$250-million to keep Lockheed alive. If Congress does not provide the guarantee—and the

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New Issue

\$50,000,000

Harvey Aluminum (Incorporated)

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Price 100%
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Kuhn, Loeb & Co.	Blyth & Co., Inc.	Tucker, Anthony & R. L. Day
Drexel Firestone Incorporated	duPont Glore Forgan Incorporated	Eastman Dillon, Union Securities & Co. Incorporated
Goldman, Sachs & Co.	Halsey, Stuart & Co. Inc.	Hornblower & Weeks-Hemphill, Noyes
Kidder, Peabody & Co. Incorporated	Lazard Frères & Co.	Lehman Brothers Incorporated
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Smith, Barney & Co. Incorporated	Stone & Webster Securities Corporation	Wertheim & Co.
Dean Witter & Co. Incorporated	Bache & Co. Incorporated	Equitable Securities, Morton & Co. Incorporated
		Paribas Corporation

June 17, 1971

This announcement is not an offer to sell or a solicitation of an offer to buy these securities. The offering is made only by the Prospectus.

1,321,420 Shares

Harvey Aluminum (Incorporated)

Common Stock
(Par Value \$1 Per Share)

The Company is offering the holders of its Common Stock the right to subscribe for these Shares, subject to terms and conditions set forth in the Prospectus. **The Subscription Offer will expire at 3:00 P.M., Pacific Daylight Saving Time, on July 6, 1971.** The underwriters have agreed, subject to certain conditions, to purchase any unsubscribed Shares and may offer the Shares, both during and after the subscription period, as set forth in the Prospectus.

Subscription Price \$19.50 Per Share

Copies of the Prospectus may be obtained in any State only from such of the undersigned and others as may lawfully offer these securities in such State.

Kuhn, Loeb & Co.

Blyth & Co., Inc.

Tucker, Anthony & R. L. Day

June 17, 1971

ford, chief executive officer of the medium-sized Security National Bank on Long Island. Recalling how he was approached by another bank to lend to the railroad, "I spoke to a friend at that bank and asked him what they were doing, running out to Huntington, Long Island, to make a loan to a corporation with \$8-billion in assets."

As to how banks can get their loan

'We have required that more people be involved in the loan decision'

standards back in shape, Woodruff feels that they must look more at cash flow and more sophisticated analysis, including the use of computers. "Because we have more marginal credits to follow these days, we are adding a few people to the corporate analysis group," he notes.

Another top New York banker says that at his institution "we have required that more people be involved in the loan decision, that more fundamental research is presented to these people, and, as an absolute requirement, that there be a six-month review of every loan. This must include a re-statement of the quality of credit by the lending officer to be sure that the things that *should* be going on are, in fact, going on."

Bank computers can work out market shares and produce quantitative estimates of the borrower's cash flow out of which the loan must be repaid, notes one analyst with a New York bank. Quite obviously, the banks were excessively optimistic in this department with respect to Lockheed. "Computer runs," the analyst concedes, "are only as good as the assumptions that went into them. If the economic situation deteriorates, therefore, you tend to go on the borrower's past record, and older corporations have a history of paying back loans which influences judgment." The snag here, he adds, is that "everybody knows everybody else, and when a Penn Central deteriorates rapidly, somebody spots it first but is muffled."

No one wants the banks to go back to the kind of conservatism that prevailed in the 1930s, which was so head-down cautious that it helped engender the Reconstruction Finance Corp (page 23). Bankers are determined that henceforth the risks they take will be backed by proper information. Yet it is not likely that they will be forever frozen into immobility by their recent loss experience.

Says a source at Citibank, "Right now, the credit policy committee people have a vivid memory of Penn Central and want to be strict. But the loan officers are increasingly eager to make loans."

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High & hard i & rent take from cap. recovery.

Cap. recovery is a residual, after i & rent. Thus replmt. force. can fail due to high i .

Now high i lowers PV, which is neg. income, and also reduces base of future i .

But high rent raises PV of land, which is + inc. and converts recovery into disposable income w/o any compensation.

Thus there is some meaning in H.G.'s idea of high rent triggering a collapse. It arrogates or kidnaps or diverts each flow from replacement, cutting into real investment.

Crisis of inadequate capt. comes when:

Machines w/o fuel. Energy crisis.

Rails & cars w/o goods to haul

Roads w/o houses

104. End of boom comes when have machines w/o gas.

105. Curr. freezing graphically shown by timber.

To liq. timber (for lumber) must sell to someone to build a house. When house finally dries up, timber gets stuck.

Thus it takes free capt. to turn old capt. Here, cons. durables are safer. Occupant uses them w/o further capt. needed.

Infrastr. projects, same. To use CVP, ~~and~~ when finally complete, need much priv. cap.

Rare mtrls. or primary products, same. Oil expln.

106. Cap. not disposable is 'indisposed', or sick.

General Dynamics finds a new boss

Feet propped on his desk, smiling, and looking completely relaxed for the first time in months, Colonel Henry Crown said, "Now we're really starting."

After an eight-month search, Crown happily announced at midweek that David S. Lewis, president of McDonnell Douglas Corp., has been named chairman and chief executive officer of General Dynamics Corp. Roger Lewis (no relation), chairman and president of the troubled defense contractor since 1962, remains as president and director.

David Lewis, president and chief operating officer of McDonnell Douglas since 1967 and heir apparent to the throne there, will assume his new duties shortly. Crown says no exact starting date was set, out of deference to Chairman James S. (Mr. Mac) McDonnell, who reportedly was disappointed but not bitter about Lewis' decision.

"We need David Lewis more than you do," Crown told "Mr. Mac." McDonnell is expected to tap a nephew, Sanford N. (Sandy) McDonnell, president of McDonnell Aircraft Co., a division, to succeed Lewis. The elder McDonnell would have trouble disputing Crown, 74, whose investment group controls 18% of GD's stock. GD, the nation's No. 3 defense contractor, has been in deep trouble since 1967.

Credit. David Lewis was president of McDonnell Co. before its merger with Douglas Aircraft in 1967. He has an excellent reputation in the industry as a production and operating man—Crown's principal prerequisites for the top job at GD. Lewis is credited with straightening out Douglas' problems with the DC-8 and DC-9, which spurred its merger with McDonnell. He is no stranger to GD, a subcontractor on the Douglas DC-10 air bus.

At 53, five years younger than Roger Lewis, David's lessons in frugality learned from Scotsman McDonnell attracted Crown, who always operated conservatively, if on a dramatic scale. David Lewis came into the GD picture only six weeks ago through a mutual friend of his and Crown's, and he won the colonel's approval after three meetings in the colonel's Chicago offices. The full board approved the selection at a special meeting on Tuesday.

Promise. Crown had given his word to Roger Lewis to keep him on as head man until the end of this year, and Crown emphasizes that "Roger will



David Lewis will leave a top spot at McDonnell Douglas to head GD.

continue as president in fact as well as in name." A contract for several years at about the same 1969 pay of \$176,295 appears to have hastened Lewis' departure as top man. David Lewis earned \$195,000 at McDonnell Douglas, and his salary at GD will be in the same range.

Roger Lewis is expected to concentrate on government and industry relations. David Lewis will decide whether to name an operating head, but it will not be Roger Lewis. ■

King Resources shrinks to survive

King Resources Co., the Denver-based natural resources outfit, is still alive today, though a good deal smaller than it used to be. It rushed to the rescue of financially disabled Investors Overseas Services, Ltd., six months ago only to wind up in serious financial trouble of its own. But, after losing \$16-million in this year's first half and running up some big debts, it has survived—to the surprise of oil industry observers.

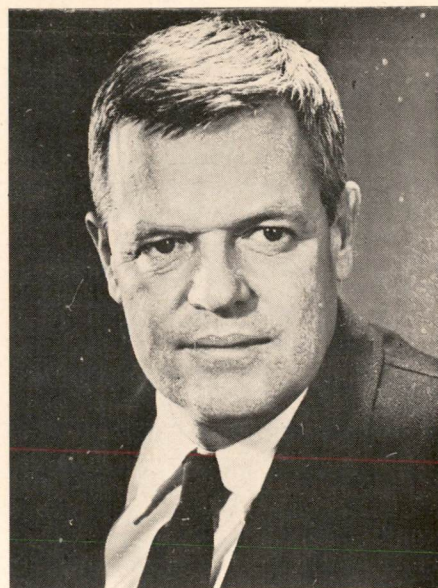
King Resources grew big through exploration work of its own, and by putting together natural resources packages, mostly gas and oil, for investors. To keep going, it has been selling off some of its holdings. Just last week, Sun Oil Co. announced it would take over the bulk of King Resources' drilling and exploration activities in the Canadian Arctic. Sun is to pay King Resources an undisclosed amount of cash, and it will assume a share of future development costs on 27-million acres of land. Said a King Resources

spokesman this week: "Somebody else is pitching and we're sitting on the bench. But it means we can stay in the ball game."

Much has changed at King Resources since founder John M. King rushed off to Switzerland in May with a deal to take over IOS, the international mutual fund empire that Bernard Cornfeld built and lost. King Resources and IOS had had a number of business dealings; IOS investments accounted for 35% of King Resources' \$118-million in revenues last year and at least that share of its \$25-million in earnings. In conjunction with IOS, King Resources had been developing much of the Canadian land involved in the Sun Oil deal. But the IOS takeover fell through, and nothing went right for King Resources after that.

IOS, in serious trouble itself, dried up as a source of revenue for King Resources. After last year's strong showing, the company had to write off \$6.9-million for suspended exploration in the Middle East and \$5.8-million lost on investments in this year's first half. Creditors began badgering the company on overdue bills, and King Resources' shares slipped from \$14 in early May to \$3.

Survival tactics. Now King is out as chairman, replaced by President A. Rowland Boucher. King has said he will quit the board at the 1969 annual meeting, which has not yet been held. Seven



Boucher: He took over from John King.

other members of the board, including astronaut Frank Borman, resigned earlier this month and were succeeded by company insiders. The company has slashed its payroll from 739 to 535, folded one 35-man division, written off a small computer software business, and is squeezing its elaborate Denver offices into half as much space.

By the end of August, King Re-

sources had fallen behind in its payments on \$10-million in loans. But last month its creditors, who are owed \$15-million for such items as oil drilling equipment, agreed to settle now for 20% of the amount due them, with the rest to be paid by January, 1972. At the same time, banks holding \$20.4-million in loans due on or before June 30, 1971, agreed to a new schedule that will extend payments until September, 1972. King Resources says it will pay off those debts from the sale of its oil properties, by selling some holdings in other non-oil properties, and out of future income.

King, who is 44, still owns 93% of the Colorado Corp., an oil fund company that spent some \$27-million with King Resources in 1969. But King Resources' troubles spilled over and forced Colorado Corp. to suspend sales and redemptions of the two oil funds it manages. Now the two funds are being reorganized, while a merger has been negotiated between Colorado Corp. and Siboney Corp., a diversified manufacturing company with some oil interests. ■

MONEY & CREDIT

The public changes its saving ways

There used to be a clear-cut line between savers and investors, with well-heeled investors putting their money into stocks and bonds and the little man putting his money into savings banks or savings and loan associations. But four years of super-tight money and record-high interest rates have blurred the line, and now the nation's thrift institutions fear the line is about to be totally obliterated. If that happens, they warn, the U. S. housing industry will be in serious trouble.

So there will be extra-close attention next week when the U. S. Treasury announces plans to raise \$2-billion in new cash. Thrift industry leaders have made plain they hope the Treasury will decide to issue bills, which are sold in \$10,000 units, rather than notes, which are sold in \$1,000 chunks. They reason that small investors will not buy many bills, but probably would load up on notes, as they did last August. Then, an offering of Treasury notes, priced to yield 7.54%, was oversubscribed tenfold. Few thrift institutions could pay more than 6% for deposits and many of those notes were taken up by small investors, using money that might otherwise have wound up in a savings bank or an S&L.

Equally unnerving for the savings



Savings banks try hard to woo savers lost to higher-yield Treasury notes.

institutions is talk that American Telephone & Telegraph Co. is mulling over an issue of "savings bonds" next year to supplement its borrowing in the bond market. The savings bonds would be sold in \$100 units through the giant utility's 2,000 local business offices, and so would be aimed directly at small investors. AT&T has so far refused to discuss the report. Already, though, President Louis R. Barba of the National Assn. of Home Builders has warned that if the bonds are issued, "It will certainly set back the anticipated recovery of the housing industry from its recent depressed state."

The Treasury and AT&T are far from the only borrowers looking to the small investor. Last January, Philadelphia's First Pennsylvania Banking & Trust Co. jumped in with an issue of \$100 notes, sold through its 73 branches, while a number of banks have been selling small-denomination "earth" bonds. This week North Carolina's First Union National Bank was ready to offer notes paying up to 7½% in units as small as \$2,500.

Disintermediation. The technical name for what has been happening is "disintermediation," meaning that the public is bypassing the financial intermediaries—banks and savings associations—and investing directly in the capital markets. The trend reached flood proportions last year when the highest capital market yields in a century drew even the unsophisticated away from depository institutions and into the market.

Wall Street prophet Sidney Homer of Salomon Bros. computes that, between 1966 and 1968, the public put an average of \$27-billion a year into savings accounts and only \$9-billion directly into the bond market. Last year, he says, \$29-billion went into bonds and only \$8-billion into savings accounts. The Federal Reserve Bank of

New York was startled at one point to receive an order for Treasury bills from an inmate of a U. S. Army stockade in Korea. Two New York bankers recall chatting in a taxi about a high-yielding issue of the Federal National Mortgage Assn., only to have their driver announce that he, too, had bought some of the Fannie Mae securities.

Based on past experience, the current decline in interest rates should have sent investors back to the thrift institutions. Moreover, the Treasury obliged the savings industry last year by hiking the smallest unit of bills from \$1,000 to \$10,000, while a number of federal agencies took similar steps. And, in fact, where savings and loan associations had a net savings loss of \$300-million in the first eight months of 1969, they had a net gain of \$4.3-billion in the first eight months of 1970.

Fight. Still, the flow of money into thrift institutions this year does not come close to providing what the mortgage market needs to close the gap between the demand for housing and the supply. What deeply disturbs the thrift industry is the probability that borrowers—private and government—will tailor future issues with an eye toward reaching this army of small investors, suddenly grown wise. That is why talk of an AT&T savings bond so worries the savings institutions, and why they have been yelling at the Treasury to issue bills rather than notes. S&L indus-

A mutual fund in Treasury bills accommodates the small investor

try leaders were hopeful this week that Treasury would heed their advice; Treasury, in turn, was not promising a thing. For one thing, the Treasury is also getting flak from small investors, who want a crack at yields higher than they can get at thrift institutions. "You can see the pressure on the other side," said one Treasury official. Also, bills are issued for under one year, while a note can run out to seven years, and Treasury would welcome a chance to stretch out the average maturity of the national debt.

Even if the savings industry wins this round, it clearly isn't home free. Just after the Treasury lifted the denomination of its bills to \$10,000, a Mutual Fund for Investing in U. S. Government Securities was launched to hurdle that barrier. Investors in this no-load fund buy shares in a portfolio of government short-term debt issues for around \$10 a share. The fund had \$32-million in assets as of Sept. 30, against \$9-million at the end of March and, says Salomon Bros.' Homer: "It's coming along very nicely. I think a number of similar funds are being started now." ■

b. Trough so deep as to kill El Dorado effect.
Demand for capt. drops -- [i.e. collateral requirements
rise so hi, has same outcome, but this is imposed by
lender & is reduced supply really, only delusory reduced
demand.]

✓ Hi collateral req. or credit rationing are not an
effective corrective, however! Bes. they fail to
shift capt. to small firms who apply for capt.
They aggravate problem. Capt. reserved for big firms.
Low numerical i, credit factor & lender's risk
allocate capt., productivity irrelevant.

Collapse of collateral values makes credit pull away from one area after another. Thus areas dry up from shortage of liq. capt., beginning w. a few. Instead of a general rise of $\bar{i}$, some areas are simply abandoned. In other areas, we even read of a "glut" of mortgage money (at hi $\bar{i}$). Thus masking developing shortage of capt. Some areas, & better credit risks, will be truly glutted with loanable funds at such times, insofar as falling collateral has ^{drying inv. opps. faster than capt. has dried up.} Shortage also masked by concurrent drop of collateral values, which makes inv. opps. look bad to lenders. Thus helping explain enigma that appears after crash, why so few inv. opps. when capt. structure is so unbalanced, ^{seemingly} creating need for more, bcs. of empty niches. The attractiveness of the niches is lost when their value falls is falling.

Business Land Loans Are, Will Be Plentiful

Journal Special Correspondence

Washington, D. C. — Funds for business property mortgages will continue to be plentiful in the coming months, with interest rates remaining firm, according to the spring mortgage survey of the National Association of Real Estate Boards.

The survey is based on data supplied to the association's department of research by a panel of 125 real estate brokers from around the nation who are specialists in commercial and industrial property financing.

Investment demand for prime quality commercial property mortgages exceeds the supply of applications, according to Maurice G. Read, association president. He said interest rates might decline further on national credit properties, though lenders would rather trade on such factors as amount, amortization or closing costs.

The general outlook is favorable for borrowers, depending on their credit standing and the location of the property.

"The outlook is for additional emphasis on environmental factors in the coming months, if that is possible," he said.

Little Change Seen

Mortgage conditions for warehouse and industrial properties will change little in the next three months, he predicted, with interest rates continuing at current levels.

Commercial property is favored by all types of investors, with borrowers offering as security a prime location property with a national credit lease well supplied with credit. Availability of credit can be described as ample for 89% of the nation, compared with 84% six months ago. In a few market areas, credit continues to be tight, even for top quality risks. They represent 2% of the nation, a percentage unchanged from last fall.

Interest Rates

Interest rates on loans for a prime location property have declined slightly during the last six months. These areas are limited in number, and in general the decline is from 6% to 5.75%.

A 5½% interest charge is

common in 49% of the nation compared with 47% last September. A rate of 5.75% is prevalent in 21%, while it is 6% in 17%.

Credit availability for commercial property in a prime location with a local credit lease has improved further during the last six months. For 71% of the areas the supply is ample while it is tight in only 3%. The most frequent charge continued to be 6% in 57% of the nation.

Availability for loans on commercial buildings in a prime location with owner-occupancy is ample in two-thirds of the nation and moderate in 27%. An interest rate of 6% is common in 59% of the nation. There has been a slight rise in the cost of credit for this type of mortgage in the last six months.

Collapse of collateral, credit away
Modest Tightening

While panel members commented extensively on tightening in the market for loans on commercial properties in poorer class neighborhoods, they reported only modest tightening in resources for business properties in secondary locations.

Currently, the supply of funds for a mortgage on a commercial property in a secondary location with a local credit lease is ample in 47% of the nation, moderate in 40%, and tight in 9%. Credit is said to be practically unobtainable in 4%.

A 6% interest rate is common for this type of loan in 69% of the nation. In the remainder, the charge is generally higher. Most frequently it is either 6.25 or 6.50.

For an owner-occupant, the supply of mortgage money for a loan on a commercial property in a secondary location is little changed from that reported last fall. Resources are ample in 45% of the nation and tight in 14%. Interest rates remain stable with 6% the dominant charge in 67% of the nation.

Nail Loose Boards

Regardless of the floor's original construction, and whether or not underlayment is used, be sure to nail down all loose boards before laying linoleum or tile.

Wood, Ramsey. "Govt mortgage credit commitments and economic stability."
JNL OF FINANCE 11:151-65 (May 1956).

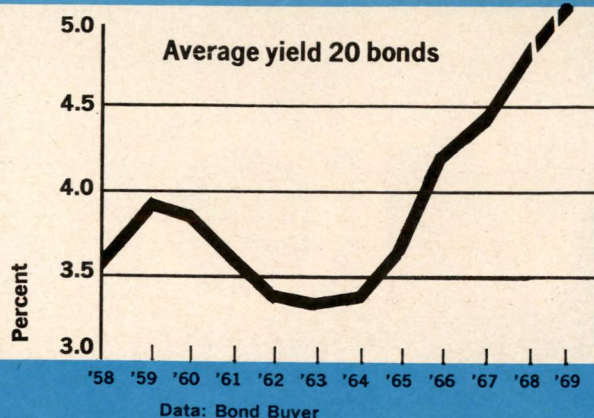
Wood is with Bd of Gvnrs, FRS.

p. 156 Much of the disentanglings from mortgage debt come, despite long term regularly amortized loans, from sales. I.e. mortgagors sell out, and repay the old loan with proceeds of the sale.

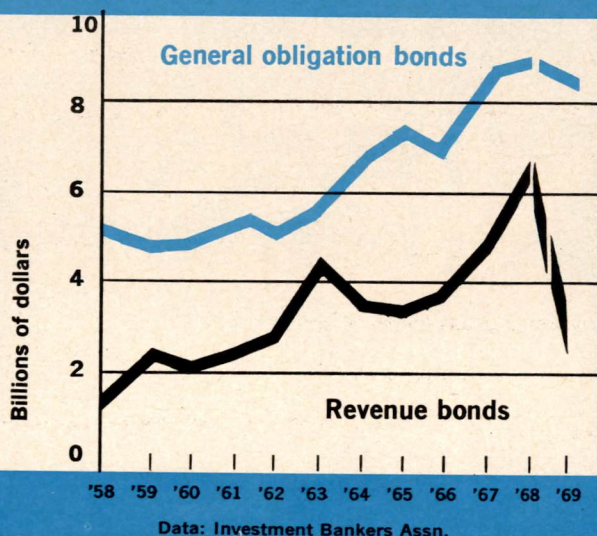
This source of funds is subject to much fluctuation, and dries up completely if sales stop.

(So: if mkt begins to collapse, source of funds disappears, cumulates.)

Municipal bond yields are at record levels...



... so volume of new issues is slackening



FINANCE

Money squeeze forces municipals to adapt

Long the pets of wealthy investors and banks, municipal bonds now are scratching for bidders. And efforts by cities to ease money woes may change market's future shape

In Moberly, Mo., work is almost completed on a \$340,000 main to carry water to the site of a new treatment plant. But the plant site is a vacant lot—the town hasn't been able to raise the \$1.2-million it needs to finish the project.

This picture is being repeated around the country where local governments, barred from the municipal bond market by record-high interest

rates, are simply running out of money for vital projects such as schools, recreation areas, and public works. California State Treasurer Ivy Baker Priest last month found she couldn't go ahead with the sale of \$40-million in state construction bonds because no bidders could be found. This week, Chicago was coming to market for a second try at marketing \$28-million in bonds for municipal improvements.

Bankers Trust in New York predicts a decline in the volume of municipal financing, from \$16.4-billion last year to \$14.5-billion by this yearend.

Reaction. This doesn't mean that the municipal bond market is drying up completely. The coupon rates on municipals are lower than those on other bonds; but, of course, the interest income isn't subject to federal income tax. And this holds obvious tax advantages for the wealthy investors and banks that largely make the market in municipal bonds.

But interest rates have been soaring steadily for the past four years and some investors are sure rates will go higher before they fall. And bond investors consider it dangerous to buy in a period of rising rates since, obviously, to keep yields high, prices are being eroded.

At the same time, the banks have been feeling the squeeze of the Federal Reserve Board's tight money policy, and haven't been giving bonds much of a play. Last week, the Fed put on even more pressure by raising the discount rate and hiking reserve requirements on demand deposits.

"From the standpoint of their yield," says Philadelphia National Bank's Gilbert Heebner, "municipal bonds are very attractive. But the bank places loanmaking on a higher order of priority than buying municipal bonds." Bankers Trust predicts banks will buy only \$5-billion in municipals this year, compared with \$8.3-billion last year.

Locked in. To make things worse, municipal borrowers—unlike most corporations—are saddled with many legal restrictions that make raising money in these times difficult, if not impossible. "Usury" laws in many states set limits on the rate that can be paid for bond money. California was thwarted in its borrowing efforts by a constitutionally set 5% ceiling.

Chicago's first try at selling its \$28-million issue, too, was blocked by usury limits. But city officials went back home and got the law changed to permit selling the bonds at a discount from their par value. Since investors will be paying a lower price, the bonds will yield a return at maturity that actually will be greater than the coupon rate.

Helping out. The cry of the cities for financial relief has brought suggestions thick and fast. New York's Governor Nelson Rockefeller has been stumping the nation for federal revenue sharing with the states. He argues that not only has the bond market been stretched to the limit, communities just cannot increase basic tax levels much more.

Says Harry G. Kivell, of Milwaukee's First Wisconsin National

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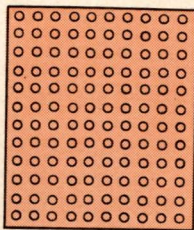
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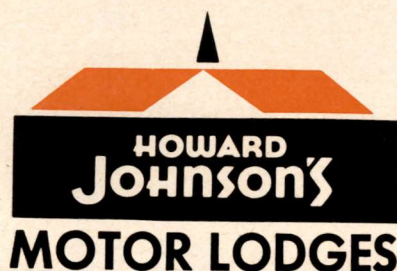
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Bank: "A number of issues have been postponed because the communities couldn't raise tax rates to meet the high interest costs. In some rural areas here, taxes have gone up 20% to 35% already this year."

Congress is considering two proposals that would keep interest costs low to communities while assuring them of a borrowing source:

■ A bill sponsored jointly by Representative Wright Patman (D-Tex.) and Senator William Proxmire (D-Wis.) would place federal guarantees under municipal bonds, and subsidize up to one-third of the interest costs. The bonds wouldn't be tax-exempt.

■ Another bill, sponsored by Senator John Sparkman (D-Ala.), would create a government bank—"Urbank"—to lend money directly to municipalities at costs as much as a third below current market rates. Urbank, in turn, would issue its own fully taxable bonds in the open market.

Three major municipal lobbyists—the National League of Cities, U. S. Conference of Mayors, and National Assn. of Counties—are giving both bills close scrutiny. And Congress seems willing to settle for whichever one the lobbies agree on. Betting is they will plump for Urbank if they can soften some provisions they feel encroach on their sovereignty. The Investment Bankers Assn., which has many members that deal in and underwrite municipals, is opposed to the Urbank bill.

New wrinkles. Meanwhile, communities are struggling to get along in the market that exists, innovating and changing in ways that may shape the market for years to come.

For example, Fairbanks, Alaska recently withdrew plans for sale of \$10.8-million in bonds because borrowing costs had reached the state's 6% usury limit. So the city is issuing one-year, tax-exempt, bond anticipation notes instead. Since short-term rates now generally are lower than long-term rates, Fairbanks' interest costs are below usury rates.

And in New York last month, Rochester sold \$5-million of the one-year notes at an average interest rate of 4.65%, when long-term rates were around 5.19%. The notes are renewable each year for six years, after which they must be paid off or converted to bonds.

John Nuveen & Co., Inc., a big municipal bond underwriter and dealer, sees individual investors doubling their holdings of tax-exempt notes this year.

Many communities now are issuing serial bonds as a means of reducing their total interest costs. The issue is broken into a series of maturities from, say, one year up to 20 years. But many underwriting syndicates find that,

Two bills to help

Senator would give communities low-cost loans from a federally sponsored bank called "Urbank." The bank, in turn, would issue its own bonds at the going market rate. The new organization's securities would be taxable



John Sparkman



Wright Patman



William Proxmire

The congressmen jointly propose bills to provide federal guarantees of municipal debt issues. Government subsidies up to 33% of an issuer's interest costs would be made. Bonds sold under the program would be taxable

while it's easy to sell off the short maturities in an issue, the long-term portion doesn't move so fast.

Rating battle. With bonds so hard to sell, a good rating from one of the rating organizations—Standard & Poor's, Moody's, Dun & Bradstreet—can be crucial. Six months ago, Philadelphia's rating dropped from A to Baa. A short time later it found no bidders for two issues totaling \$28.5-million. In January a third issue for \$30-million was postponed indefinitely for lack of bidders.

"It's touch and go for the city of Philadelphia," says Anthony Coculo, vice-president of Fidelity Bank, "until they get their financial house in order. Investors are wary of the whole situation."

And representatives of the Skagit, Wash., public utility district went to New York last week to try to raise their rating. They figured they could reduce their interest costs by a quarter of 1% by getting their rating bumped up from Baa to A. **End**

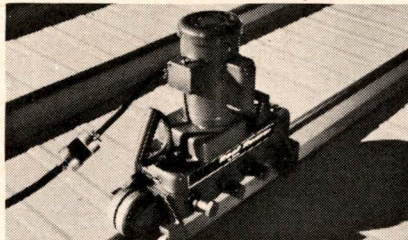
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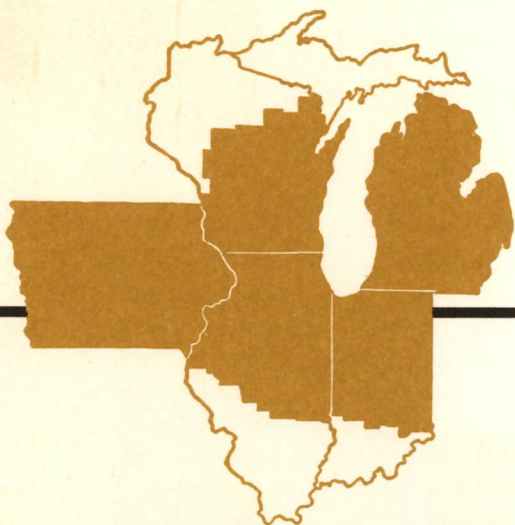
And more dependent on land
market.

See "Urban Expansion", p. 513

A review by the **Federal Reserve Bank of Chicago**

Business Conditions

1963 September



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THE Trend OF BUSINESS

Business conditions continue to be favorable. At mid-summer many business firms in both the consumer and capital goods industries reported that 1963 sales and orders had exceeded expectations at the start of the year—substantially in some cases. Last year at this time experience typically had fallen short of initial projections.

In mid-August the Chairman of the President's Council of Economic Advisers estimated that the gross national product (total spending on goods and services) would be at least 580 billion dollars for all of 1963. This implies a further moderate rise in activity through the remainder of the year. After adjustment for price changes, the 1963 level of spending would indicate a rise of somewhat more than 3 per cent in production over the 1962 total or slightly more than the average gain for the past 10 years.

Three major developments have played a role in buoying business sentiment in recent months. First, seasonally adjusted retail sales—virtually level between November and May

—rose appreciably in June and July. Second, industrial production increased in June and July despite a sharp drop in steel output. Third, construction contracts, which were somewhat sluggish in the first four months of the year, rose substantially in May and June.

Retail sales improve

Consumer purchases of goods have increased in each quarter since the current upswing began in early 1961. This trend played a large role in reversing the slight decline in business investment in new plant and equipment and inventories that developed late last year. While business investment turned up in the second quarter of 1963 some observers expressed uneasiness over indications that retail trade had leveled off. However, gains in retail trade in June quieted this concern and preliminary data indicate that consumer purchases continued at a higher level during July and early August than in the spring.

Retail trade in June and July was at a record annual rate of 244 billion dollars, al-

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most 6.5 per cent higher than the level of a year earlier. This compares with a rise of 4.3 per cent in personal income. Both hard and soft goods shared in the increase. During July, deliveries of new cars to customers were at an annual rate of well over 7 million, 13 per cent above July of last year which in turn had been the best month since 1955. Sales of new cars in August and September will be held back to some extent by low inventories of certain popular makes until the 1964 models become available in quantity. A similar development was noted last year at this time.

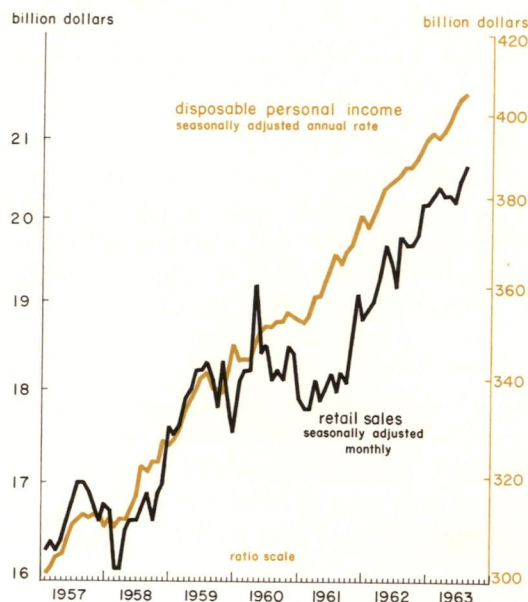
Department store sales in July and early August were 5 per cent above those of last year, both in the nation and the Seventh Federal Reserve District. Of the large metropolitan areas in the Midwest, Chicago and Detroit reported the largest gains in department store sales.

Industrial production rises further

Production of steel for ingots and castings dropped from a peak annual rate of 138 million tons in May to 104 million tons in July. While the labor-management agreement was reached in April, it took somewhat more than a month for subsequent reduction in orders to be reflected in production figures. The June-July decline in production—after allowance for usual seasonal changes—was about 9 per cent. Despite this drop, widespread increases in production of other materials, consumer goods and business equipment resulted in an over-all rise of 1.7 per cent in industrial production in June and July. Industrial production has risen appreciably each month since last January after a six month period of virtual stability.

Steel output declined sharply further in August, but steel producers are looking forward to an early reversal of this trend. A study by *Iron Age* indicates that steel in the

Consumer purchases of goods have increased each quarter since 1961



hands of fabricators and warehouses will be down to a near "normal" 68-day supply by the end of September. Forecasts of steel production for the year continue to fluctuate around 105 million tons, the highest level since 1957. This would mean output of about 46 million tons in the second half of the year compared with 59 million tons in the first half and 44 million in the second half of last year.

Trends in orders and shipments of durable goods producers have been influenced substantially by fluctuations in demand for steel (see charts). The sharp downtrend in steel orders after March 1962 and April 1963, of course, reflects the conclusion of labor management negotiations without work stoppages. For durable goods producers other

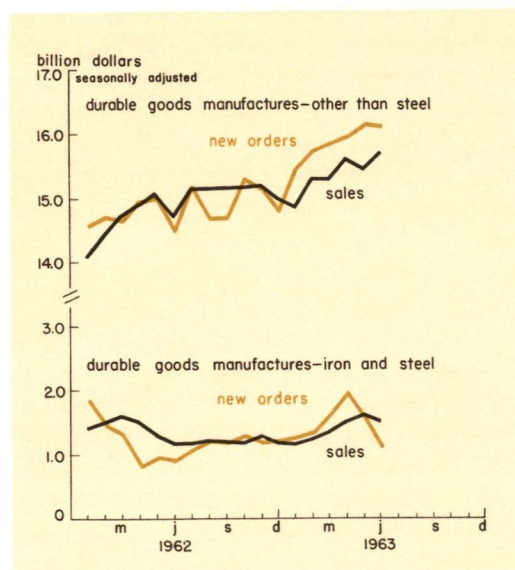
than steel firms, new orders were substantially above shipments in each month during the first half of 1963.

Inventories held by all durable goods manufacturers rose by about 1 billion dollars in the first half of 1963, accounting for about half of the rise in total business inventories. Nevertheless, at midyear inventories of durable goods producers amounted to only 1.95 months sales for June compared with 2.05 months a year earlier and 2.02 months at the start of 1963. This was the lowest midyear ratio of inventory to sales for hard goods manufacturers since 1959.

Construction still headed up

Total construction reached a record annual

Trends in orders and shipments of durable goods producers influenced by demand for steel



rate of 64 billion dollars during July. For the first seven months of 1963, outlays were 4 per cent above those of the same period of 1962. During this period residential outlays were up 7 per cent, public construction was up about 2 per cent and non-residential private construction was about even with last year.

Recent trends in construction contracts reported by F. W. Dodge suggest that activity will rise further. For the January-April period, construction contracts were about even with last year for the nation and only 2 per cent higher than last year for the Midwest. After a sharp gain in May and June, however, total contracts in the first half of 1963 were 6 per cent above last year for the nation and up about 7 per cent for the Midwest.

Construction outlays on new industrial plants have been only slightly above last year thus far in 1963. Contract awards, however, have been 12 per cent ahead of last year for the nation and in the Midwest the rise has been twice as great. A large steel plant contract for northern Indiana helped boost the total for the Midwest, but sizable contracts also have been let recently to construct chemical, food processing and rubber goods factories in Illinois.

Early this year new housing starts were lagging in most Seventh District centers. For the first quarter housing permits issued in the District were 11 per cent less than last year compared with a 6 per cent rise for the nation. Including the April-May figures, however, housing permits in the District were 3 per cent above last year for the five-month period compared with an 8 per cent rise for the nation. Large increases were shown for Detroit and Milwaukee. The ready availability of mortgage funds—indicated by longer maturities, lower down payments and lower

interest rates on home loans—doubtless has aided the recent rise in home construction.

Unemployment lower in Midwest

As in the case of industrial production, nonfarm wage and salary employment was stable from July 1962 to last January. Between January and July, 1963, however, there was a rise of 1.2 million; manufacturing, which accounts for about 30 per cent of the total, shared proportionately in the gain.

In June wage and salary employment was about 2 per cent higher than last year in the five states of the Seventh Federal Reserve District, a somewhat greater improvement than that reported for the nation. Estimated unemployment—those individuals without jobs and actively seeking work—as a percentage of the labor force currently is well below the national rate in all District states, as shown in the table below.

Clearly, the most dramatic improvement in the Midwest labor situation in recent years has taken place in Michigan, largely as a result of the recent high level of auto output. Some of the reduction in unemployment in various centers is believed to have resulted from out-migration and the tendency of stu-

dents to remain in school rather than seek scarce summer jobs.

Unemployment rates in June*

	1960	1961	1962	1963
	(per cent of labor force)			
United States	6.1	7.5	6.0	6.4
Illinois	4.3	5.8	4.5	4.0
Indiana	5.1	6.7	4.7	4.0
Iowa	N.A.	N.A.	2.8	2.9
Michigan	6.5	10.0	6.2	4.9
Wisconsin	3.8	4.8	3.8	3.8

*Not adjusted for seasonal variation.

N.A.—Not available.

In June the Labor Department re-classified the major labor markets of Detroit and Terre Haute as “moderate labor surplus” rather than “substantial labor surplus” centers. (A 6 per cent unemployment rate is the dividing line). After these changes none of the 23 major labor markets in the District were included in the substantial labor surplus group—for the first time since the present series was started in 1956. Nationally, 38 of 150 labor market areas were reported to have substantial labor surpluses in July.

Foreign long-term borrowing in the United States

On July 18 the President requested Congress to impose a temporary tax on the purchase by United States residents from foreigners of foreign intermediate- and long-term securities. The major purpose of the tax is to reduce the amount of foreign borrowing in

this country by increasing the cost. The proposed tax, part of a broad attack on the continuing deficit in the balance of the international payments, focuses attention on the sharp rise in foreign long-term borrowing in the United States which has contributed sub-

stantially to the deficit during the past year and a half.

Capital outflows resulting from the sale of new foreign securities in the United States totaled almost 1 billion dollars in the first half of 1963. This compares with 482 million in the first six months of 1962 and only 523 million in all of 1961. More than 600 million dollars—nearly two-thirds of the current year's outflow—went to Canada, about 200 million to West Europe and 100 million to Japan. Approximately four-fifths of this total represented long-term borrowing by foreign governments and business firms, with the rest accounted for by the sale of equity issues.

With the exception of funds borrowed by foreign governments for the purpose of bolstering their holdings of dollar exchange, foreigners borrow in the United States because funds here are both cheaper and more available than in other countries. In recent years, long-term interest rates in the United States have been below those in many other industrial countries. In mid-1963, for example, long-term rates on government securities averaged about 4 per cent in the United States, 5 per cent in Canada, France and

Italy, 5½ per cent in the United Kingdom and 6 per cent in Germany.

In part, the lower domestic rates reflect the more highly organized capital market in this country. Funds are channeled quickly and efficiently from savers to borrowers by institutions which through many years of uninterrupted service have developed effective means of handling and transmitting funds. In addition, these institutions have gained the confidence of investors, an important prerequisite for a broad financial market.

Lower interest rates also reflect Federal Reserve policies designed to accelerate the rate of domestic economic growth through monetary ease. On the other hand, most European countries have experienced "full employment" during most of this period and have used monetary policy to maintain interest rates at high levels to dampen inflationary pressures.

The interest rate is not the only cost of borrowing through the sale of securities. Borrowers also pay costs of underwriting, legal work and taxes. These costs are estimated to average somewhat less in the United States than in other countries with highly developed money markets, such as the United Kingdom and Switzerland, and much less than in countries such as Germany, France and Italy where capital markets are less fully developed.

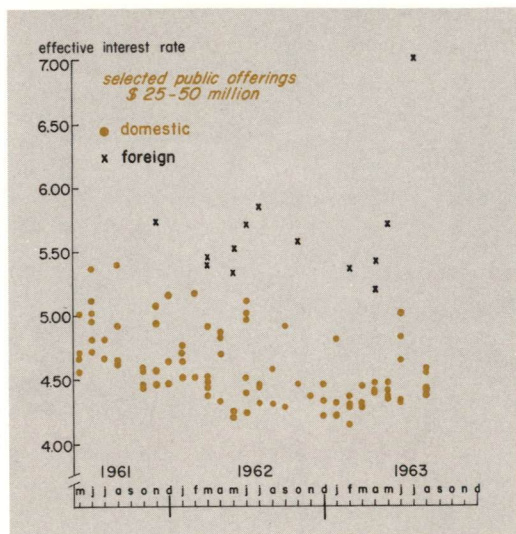
Apart from borrowing costs there is the question of availability. The United States capital market can accommodate a much larger volume of financing and much larger individual issues than that of any other country. The more limited availability of funds abroad reflects less efficient money market mechanisms and institutions as well as lower levels of aggregate and per capita income and savings. Bouts with domestic inflation and currency devaluation in past decades have

United States purchases of new foreign securities rise sharply

	1961	1962	1963*
	(million dollars)		
Total new issues	523	1,076	1,954
Canada	237	457	1,214
West Europe	57	195	410
Japan	61	101	184
International institutions and rest of world	168	323	146

*Preliminary; first half of year at annual rate.

Foreigners pay higher interest rates than domestic borrowers in United States capital market



also made many Europeans wary of investing savings in long-term fixed-value securities.

Borrowing restricted abroad

In most foreign countries, borrowers—especially nonresidents—are subjected to a variety of controls which are often highly restrictive. Such controls may be imposed officially by the government as in the United Kingdom and the Netherlands or may as in Switzerland reflect voluntary agreements between the private financial sector and the government. In either instance demands on the domestic money market are held in check. With demand restricted, interest rates are lower than would otherwise be the case and capital outflows are reduced. These controls permit countries to isolate their money markets, more or less, from markets in other countries. Through such measures, Switzer-

land, for example, is able to maintain relatively low long-term interest rates—3½ per cent—without stimulating either excess domestic borrowing or large capital outflows. Similarly, the United Kingdom is able to restrict long-term foreign lending largely to Commonwealth countries.

Besides the United States, only Germany among the major industrial countries imposes no restrictions on its money market. The German market, however, has only a limited capacity to accommodate either domestic or foreign borrowing.

Because of controls and the limited capacity of most capital markets, foreign governments and business firms often are unable to find credit accommodation in their own countries or in markets other than that of the United States. Consequently, these borrowers may be faced with the alternative of either seeking funds in the United States or foregoing planned expenditure programs. In such cases interest rate differentials may not be a major deterrent.

United States main supplier of funds

In the three-year period 1960-62, the United States supplied one-half of the long-term funds raised by governments and business firms in eight major western countries through the public sale of bonds outside their own countries. Switzerland supplied a quarter of the total, the United Kingdom 13 per cent, the Netherlands 9 per cent and Canada, Germany, Italy and Sweden combined only 5 per cent. In 1962, the United States supplied over 60 per cent of the long-term funds raised publicly by all borrowers outside their own countries. These figures exclude the sale of bonds placed directly with large lenders.

Foreigners pay considerably higher rates in this country than do major domestic borrowers. The accompanying chart shows that

in recent years foreign borrowers paid on the average 1 to 2 per cent more in the United States market than comparable domestic borrowers. On occasion, interest rates paid here by foreigners exceeded the posted interest rates in their own countries. In 1961, for example, the government of Australia borrowed 25 million dollars in the United States at an interest rate of $5\frac{3}{4}$ per cent. Australia also borrowed 15 million dollars in Switzerland during the year at $4\frac{1}{2}$ per cent, 10 million in the Netherlands at 5 per cent and about 20 million in Canada at 5.9 per cent. At the same time, interest rates on long-term government bonds averaged about $5\frac{1}{4}$ per cent in Australia.

The limited availability of funds abroad and heavy credit demands resulting from rapid economic growth overseas account in great part for the willingness of foreign borrowers to pay higher rates in the United States. This suggests that foreign long-term borrowers may be relatively insensitive to changes in interest rate differentials between other capital markets and that of the United States. If so, small increases in long-term rates relative to foreign rates probably would not reduce the volume of foreign borrowing materially.

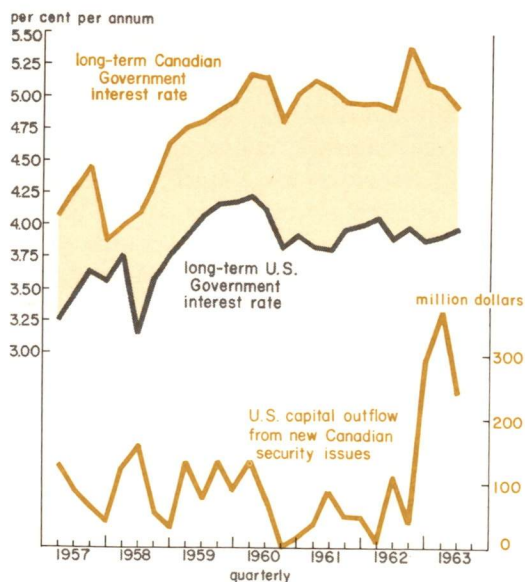
Foreign borrowing in this country for the most part has not been closely associated either with changes in long-term domestic interest rates or the differences between United States and foreign rates. The jump in the sale of new Canadian securities in recent months, for example, occurred mostly while rates here held steady and Canadian rates declined. Likewise, Canadian borrowing declined substantially during 1960 while United States interest rates were falling sharply relative to Canadian rates, a development which would appear to favor borrowing in this country. The abrupt decline in United

States interest rates in 1958 seems to have attracted foreign borrowing, but a large part of this rise was attributable to borrowing by the World Bank. The sharp rise in rates in 1959, however, failed to discourage Canadian borrowing more than briefly. Since 1957, Canadian securities have accounted for about half of all new foreign issues purchased by United States residents.

Cost of foreign borrowing to rise

Increases in the general level of long-term interest rates affect domestic as well as foreign borrowers. United States monetary and fiscal policies continue to be directed toward stimulating domestic investment and consumption while guarding against short-term capital outflows. Any slackening in domestic long-term borrowing in consequence of higher interest rates would tend to dampen domestic busi-

Canadian borrowing in United States not closely related to interest rates



ness investment and slow the rate of economic expansion.

The President's tax proposal is estimated to increase the interest cost of long-term borrowing by foreigners by about 1 per cent. Costs to domestic borrowers would be largely unaffected. Securities sold by "underdeveloped" countries and international institutions of which the United States is a member would be exempt from the proposed tax. In addition, the President would be empowered to exempt selected securities sold by industrially advanced countries, primarily Canada, when the consequences of the tax "threaten to imperil the stability of the international monetary system."

Because the proposed tax would affect only the cost and not the availability of funds, most of the nondiscriminatory features of the United States capital market would be retained. Any foreign borrower willing to pay the increased cost would be able to sell securities in the United States. Domestic borrowers and some foreign borrowers would be favored, however, through lower costs.

To reduce further the dependence of foreign borrowers on the New York money market, United States officials have urged countries with highly developed capital markets to remove their restrictions on foreign long-term borrowing. Countries with less developed markets are urged to initiate measures which would broaden and improve their money markets thereby reducing both interest and other costs and increasing the availability of funds. Domestically, officials have asked underwriters to attempt to sell a larger proportion of new foreign securities to foreign purchasers so as to reduce the net out-

One-half of all foreign long-term bonds sold publicly in major countries are floated in the United States*

	1960	1961	1962	Total 1960-62
	(million dollars)			
Total issues	546	729	737	2,012
United States	306	223	457	986
Switzerland	132	218	140	490
United Kingdom	81	112	62	255
Netherlands	—	146	28	174

*Major countries include United States, Switzerland, United Kingdom, Netherlands, Germany, Canada, Italy and Sweden.

SOURCE: International Bank for Reconstruction and Development.

flow of long-term capital.

Foreign long-term borrowing in the United States may be expected to continue at high levels as long as profit opportunities abroad continue to be favorable and foreign money markets remain restricted, either because of controls or capacity. Although foreign borrowers probably have been attracted to the United States more by the availability of funds than by lower borrowing costs, an "interest equalization" tax may discourage some foreign bond issues. This would limit the flow of dollars to foreigners and reduce the deficit in the balance of payments.

Proposed as a short-run emergency measure, the tax is not expected or intended to provide an over-all solution to the payments deficit, or to become a permanent part of the United States exchange mechanism. In the long-run, countries can attain their most efficient production and highest incomes only when capital, as well as goods, is free to move among countries in response to competitive forces.

Decline in home mortgage credit quality?

Mounting concern has been expressed lately over the quality of credit. Recent trends in personal bankruptcy and business failure rates, instalment loan delinquencies and mortgage foreclosures, and indications that easing of lenders' standards has proceeded further have been read as signs of deterioration. Continued rapid growth in the volume of debt, of course, underscores any apprehension over its quality. Understandably, the huge 170 billion dollar total of outstanding loans on 1-4 family residences has attracted considerable attention.

Preoccupation with the "soundness" of credit is nothing new. Generally, any relaxation of loan standards—as to term or down payment, collateral or borrower credit requirements or the uses made of borrowed funds—is apt to touch off some "viewing with alarm." So also is a sharp or long sustained climb in debt, or evidence that borrowers are finding it difficult to meet their obligations. And understandably so, for credit plays a key role in the modern economy. The stability of the credit structure merits watchful attention.

The postwar record as a whole may be judged reassuring in a number of respects. Relatively moderate rates of delinquency and loan loss and, even more significant, the rapid growth and financial success achieved by credit institutions during the period are scarcely consistent with basic weakness or unsoundness. Yet, difficulties on the credit front

may be months or even years in a stage of germination.

An elusive characteristic

Quality of credit is not only hard to measure but hard to define in a way to make it a usable concept. With hindsight, a credit is good if contract terms have been fulfilled satisfactorily. This is no help, though, in judging a loan beforehand. Whether the debt will be paid off as the borrower has promised is for the future to tell.

No lender will make a loan he believes unlikely to be repaid but every lender must be satisfied with something less than certainty of full repayment. The prospect that loan obligations will be honored is crucial to any judgment on credit quality. Experience and a "feel" for the business are perhaps the best guides the lender has.

In a sense, the fact that a loan has been made is indication enough that its quality passes muster, or that it did so when it was granted. Debt contracts are entered into voluntarily on both sides of the bargain. The lender must be satisfied with prospects for recovery of his funds—and the inflow of finance charges the borrower agreed to pay—or the loan would not have been made.

There is the possibility, however, that a credit sound enough at its inception may turn bad, if only temporarily, because of some unforeseen occurrence during its term. The bor-

rower may lose his job or suffer extended illness. A general economic decline, moreover, may transform many once prime grade loans into questionable ones—at least for a time.

Judging the application

In passing upon a loan application, a lender seeks answers to two key questions: What risk is there of nonpayment by the prospective borrower and what recourse exists if the loan turns out badly? To answer the first, the lender must know something (often a great deal) about the applicant's past performance—his credit rating—and as much as possible about his prospects.

In judging an applicant's prospects it may be important to know what the proceeds of the loan are to be used for, because this may have a bearing upon the borrower's inclination and ability to honor his obligation. Knowing what use is to be made of the funds also helps to supply an answer to the second question.

Will the residence that the borrower proposes to buy or build prove to be "good" loan collateral? It will prove so if, on default of the borrower and foreclosure by the lender, it can be resold at a price high enough to cover the remaining loan balance and the expenses connected with recovery.

The shorter the loan term the greater the rate of debt reduction and build-up in equity. The greater the equity, the more reluctant the borrower is likely to be to surrender his property and thus the more strongly motivated to meet his obligations on schedule. The growth in equity, moreover, affords the lender protection against a decline in market value, if foreclosure proves necessary.

The relation between the amount of the loan and the value of the property securing it directly reflects the size of the borrower's in-

terest in the property. Thus, the higher the ratio of loan balance to property value, the greater the lender's risk, other things the same. Holding back on loan term or on the loan-to-value relationship are alternative ways for the lender to try to limit his risk exposure. In certain instances, on the other hand, a substantial down payment or a schedule of large instalment repayments may so tax the borrower's budget as to heighten the chance of difficulty. Sometimes, therefore, repayment schedules are more likely to be met on small down payment home loans than those calling for a larger borrower equity. The same may hold true for some long maturity loans as compared with those of shorter term.

Evaluation of any loan application typically amounts to comparison of its features with a set of prevailing "standards." Some of these will be statutory or administrative requirements setting maximum terms or minimum down payments. Thus, a national bank is not permitted to make a home loan having a term exceeding 20 years or amounting to more than 75 per cent of property value.

Other standards may reflect internal policy. Examples are definitions of acceptability in terms of loan-to-income ratios, the borrower's occupation and seniority on the job and the age of the property to be financed as well as its location, use and type of construction. Frequently, the components of a given set of standards are interrelated: a prevailing 75 per cent ceiling on the loan-to-property-value relationship may be available only for terms not exceeding 15 years, and a 20-year term may be had only when the loan-value ratio is, say, two-thirds or less—that is, the down payment is at least one-third. A 75 per cent loan is "riskier" than one of 66⅔ per cent and the lender may protect himself by insisting on a shorter term for the low equity loan than for

one with a greater equity.

At any given time, loan interest rates and other charges vary considerably from case to case. Much of the reason for this is that differences in rate serve in large measure to compensate for differences in risk. A lender willing to make a mortgage loan at $5\frac{1}{4}$ per cent, provided the down payment is at least one-third, may be equally willing to lend at only a quarter down if the rate is $5\frac{1}{2}$ per cent. Or, if a 15-year loan will be made at $5\frac{1}{4}$ per cent, a 20-year term may be acceptable at $5\frac{1}{2}$ or $5\frac{3}{4}$ per cent.

Risk "premiums" of this kind are embodied in the nominal yields on virtually all loans and investments, including many of exceptionally high rating. Indeed, any use of credit must offer the lender or investor some special yield inducement to assume risk, however slight it may be. Even a prime real estate mortgage will provide an interest return that includes an element compensating the lender for accepting a somewhat less sure promise of repayment than, for example, he might ascribe to an obligation of the U. S. Treasury.

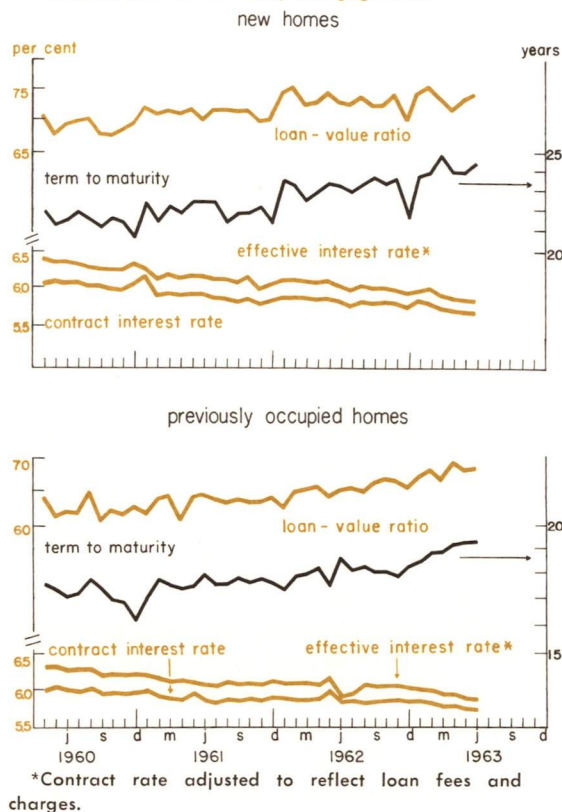
The prime objective of a financial institution is to secure the best possible net return on its total holdings of loans and other investments. The higher the net yield, the better the quality of the "package" of loans held. Gross yields on loan holdings must be great enough to cover the costs and losses associated with individual instances of default. The interest charges on loans of a particular type will tend to reflect the risks associated with such loans, as well as these may be judged beforehand. Differences in rate, in short, constitute a means of standardizing loan *quality* in the face of differences in risk.

Easier terms in home loans

During the past two or three years, standards in residential financing appear to have

Credit terms in Chicago home mortgage market have eased since early 1960

Average maturities and loan-value ratios increase as rates decline on 1-4 family mortgage loans



undergone appreciable relaxation, while the volume of outstanding home mortgage debt has grown rapidly. Some observers attribute this to the continuing influence of the FHA and VA programs for mortgage insurance and guarantee, under which long-term financing with little or no down payment has been made widely available. Practices in conventional lending, according to this view, have had to resemble those in the Government-underwritten end of the market in order to remain reasonably competitive. Regulations

governing this type of mortgage lending, largely as a result, have been progressively liberalized until there is today no great difference between the loan terms and minimum down payments available in conventional financing and those available with the Government insurance or guarantee feature.

From information made available to this Bank on home mortgage loans made in the Chicago area—by banks, savings and loan associations and others—it appears that the past three years have seen an almost uninterrupted lengthening of loan terms and climb in loan-value ratios in the local market. This has taken place against the backdrop of declining mortgage interest rates. The accompanying chart shows monthly averages of term to maturity, loan-to-value ratio, contract interest rate and effective interest rate for non-guaranteed and noninsured mortgages on new and existing 1-4 family properties. Data cover the period since April 1960, when such information first became available.

Shedding further light on changes in the Chicago market during the past year and a half or so are indications of a considerable gain in the relative volume of home mortgage financing in the longer maturity ranges. In the case of loans on new properties, 72 per cent of the transactions reported in the first six months of 1963 carried maturities of 22½ years and longer, contrasted with 64 per cent in early 1962.

Even more pronounced was the relative increase in long-term loans on properties that had been previously occupied. Here, maturities of 22½ years and more were reported for 28 per cent of the total in January-June 1963, as contrasted with 21 per cent a year earlier. Moreover, loan-value ratios of 85 per cent and beyond were found in 10 per cent of the cases this year—up from 6 per cent in the first six months of 1962.

The narrowing of down payments on home loans in the Chicago market appears to have been in line with developments since 1960 in the national market, as reported by the Home Loan Bank Board for Federal savings and loan associations. The power to make loans of up to 90 per cent of value was conferred on the federally chartered associations late in 1958. In the following year, 102 million dollars in loans closed had loan-to-value ratios exceeding 80 per cent. Reflecting the slight decline in total home mortgage financing that occurred in 1960, the volume of "over-80 per cent" lending dipped to 95 million in that year. But in 1961, it rose sharply to 248 million and in 1962 it more than doubled, reaching 597 million dollars. Altogether, more than a billion dollars in home loans with down payments of less than one-fifth of value were made by Federal savings and loan associations between 1958 and the end of 1962.

During much of the postwar period, real estate prices were rising. This served to accelerate the build-up of equities by home mortgage borrowers. Even with a 25- or 30-year loan maturity and a down payment of 10 per cent or less, three or four years' time often enabled a buyer to gain a sizable stake in his property, with a rising market contributing more to the growth in equity than the slow decline in the mortgage loan balance.

In the past three or four years, however, real estate prices have advanced little if at all. Borrowers have accumulated equities in their properties almost entirely by paying down their loan balances. No appreciable assistance has come from the trend in market prices. Because of this, some observers have expressed concern over the continued drift toward longer terms and smaller down payments in home financing.

Relaxation of loan standards, however, need not signify quality deterioration. Longer

terms and smaller down payments may be less "safe" than shorter terms and larger down payments. The question remains, however, whether in fact they prove to be so. One step toward an answer is to review lenders' collection experiences and the frequency with which repossession of collateral has been necessary.

Slowing repayment rates?

In 1962, more than 86,000 nonfarm real estate mortgages were foreclosed. This was slightly more than 0.4 per cent of the estimated total number of home mortgages in force in the United States at the end of the year.

The annual volume of home mortgage foreclosures has been climbing since the end of World War II and has risen more than eight-fold from the unusually low level of 1947. A particularly sharp increase occurred in 1961, when the total jumped 42 per cent from the year before. The rise last year was considerably smaller—18 per cent—and in the first quarter of this year the gain over a year earlier was 12 per cent.

Although foreclosures last year were somewhat more numerous than in 1940—and well above any year between then and 1962—the 1962 foreclosure *rate* (the number as a proportion of the total of mortgaged properties) was only about half as great as in 1940. This reflects the substantial growth over the period in the housing supply and the prevalence of mortgage financing. In the depression years before 1940, of course, foreclosures had been far greater than in any other period. In 1933 alone, more than

a quarter of a million nonfarm loans—three times as many as last year—were liquidated in this fashion. Even in the closing years of the prosperity decade of the Twenties, foreclosure activity was considerably above anything experienced since World War II.

Before moving to the stage of foreclosure, a loan passes through a term of delinquency or default as the borrower encounters difficulty in making his scheduled payments. Delinquency rates reported by the Mortgage Bankers Association of America have shown some upward movement in the past year or so, but, over-all they have remained within the range of recent experience (see table). Nevertheless, the rates for the first half of 1963 were above those for the same periods in the two preceding years, particularly for FHA and VA loans.

Delinquency ratios are somewhat deceptive in that they do not directly reflect precautionary action by lenders in order to main-

Delinquency rates on 1-4 family home loans, 1961-63*

Quarter	All loans	VA	FHA (per cent)	Conventional
1961 I	2.73	3.31	2.68	1.67
II	2.66	3.19	2.65	1.62
III	3.02	3.61	3.08	1.78
IV	3.10	3.75	3.08	1.85
1962 I	2.68	3.08	2.72	1.73
II	2.67	3.04	2.73	1.75
III	2.88	3.29	3.01	1.72
IV	3.04	3.53	3.17	1.76
1963 I	3.03	3.45	3.21	1.75
II	3.09	3.51	3.26	1.79

*Data are U. S. averages for loans serviced by reporting mortgage companies. Ratios cover loans one or more instalments overdue.

tain collections. Thus, the comparatively moderate rates reported may have been achieved through an intensified effort by lenders to forestall default—at the cost of added administrative expenses impinging upon net earnings. There is no ready way to measure the importance of this factor, but trade reports indicate that many lenders have stepped up their loan servicing activities during the past year or two in order to ward off a rise in delinquency and the consequences such a development might have.

Effects on quality uncertain

From the kinds of information that it is possible to piece together on the matter of home mortgage credit quality, a tentative conclusion might be that the *forms* of credit have indeed undergone modification in the direction of “deterioration,” and that possibilities for collection difficulties in the term ahead thereby have been increased. Thus far, however, troubles on the collection front have been of modest proportions and generally confined to a limited number of geographical areas. Yet even this is not to be taken as the acid test. In the last analysis, it is the financial viability of lenders and borrowers alike that mirrors the soundness and quality of the credit provided. The record on this score for the most part has yet to be written.

One of the leading factors behind recent apprehension over the condition of credit quality appears to be the course that events have taken since the January 1962 relaxation of Regulation Q, which sets the maximum rates of interest that commercial banks may pay on time accounts. The wave of rate increases set in motion by the hike from 3 to 3½ and 4 per cent in the ceiling rates undoubtedly helped to swell an already sizable net inflow of savings and other time deposits, thus placing the banks in a position to com-

pete with increasing vigor in the acquisition of mortgage and instalment loans, along with other long- and intermediate-term investments.

A “reach” for risky credits?

Observing the continuing stretch-out in loan maturities and dwindling of loan down payments, some have concluded that the rise in time account interest rates has prompted bankers—and other lenders, partly in response to commercial bank competition—to reach out imprudently to build up holdings of high-yield, risky credits in order to cover their now higher interest expense. This apparently assumes that riskier loans produce more generous net yields than less risky ones. If this is so, it might be doubted that such loans are in fact of questionable quality. If they are indeed higher in yield than less risky loans, it may appear odd that such credits were not sought before the change in Regulation Q and the ensuing rise in deposit interest rates.

Judgments on these matters, however, are necessarily tentative at the present time. Only with hindsight can loan portfolio yields be precisely assessed and only such a determination can provide a definitive evaluation of the bearing of recent and contemporary lending practices upon the financial well-being of lenders and borrowers.

The accelerated rise during 1962 in time accounts at commercial banks—following the substantial gains in 1960 and 1961 and alongside continuing rapid growth in the share capital of savings and loan associations—took place at a time when the structure of demand in the housing market was undergoing fundamental modification. Since 1960, the construction of multi-family housing has scored sharp gains, while the building of single-family detached dwellings has remained virtually stable at slightly under 1

million units annually, compared with the 1.2 million constructed in 1959.

The result has been a change in the pattern of single-family home lending. Relatively fewer prime loans have been made on new construction, while relatively more "risky" loans have gone to owners of older dwellings. In the Chicago market, for example, used or previously occupied 1-4 family dwellings accounted for more than 66 per cent of all home mortgage lending in the first quarters of both 1962 and 1963. This compares with 62 per cent in the same quarter of 1961.

In the nation as a whole, it also appears that a growing proportion of home mortgage funds has been going into the refinancing of existing properties. Estimated construction spending on single-family homes totaled 16.3 billion dollars in 1959. Recordings of mortgages under \$20,000 (a rough measure of residential mortgage financing) amounted to slightly less than twice this amount—32.2 billion dollars. In 1960, expenditure on new homes was down 17½ per cent, while the drop in recordings was only 9 per cent. In 1961, building was off again—by 2 per cent—but mortgage recordings increased 6 per cent. Last year's construction outlays turned up by about 5½ per cent; recordings scored a gain of nearly 10 per cent. In 1962, the ratio of recordings to single-family construction expenditure was 2½ to 1, compared with the 2 to 1 relationship three years before.

Part of the reason for the growth in mortgage financing in relation to the volume of construction outlays lies in the shrinkage of down payments and resulting rise in the proportion of total construction expenditure financed on credit. This, of course, is one of the signs widely taken as an indication that the quality of home mortgage loans has been declining. It also seems clear that existing properties have absorbed a growing propor-

tion of mortgage credit extended and that a sizable share has been devoted to uses little related to the financing of real estate as such. This, too, has been construed as evidence that lenders have been moving toward lower grade loans.

It is possible, however, that the observed increases in loan-value ratios and terms to maturity and the liberalization of practice mirrored in other characteristics of new mortgage transactions of the past two or three seasons, and the apparent slowing in collections, reflect an attempt by financial institutions to adapt to changing patterns of credit use and need. Rather than having reached out to extend risky (but high-yield) credits in order to cover higher interest expense, the banks and other lenders have by this interpretation essentially accommodated their lending practices to the alterations that have occurred in the structure of credit demand registered in the market.

Since World War II, something on the order of 400 billion dollars in mortgage funds has gone into the financing of 1-4 family dwelling units. This huge volume of credit has played an indispensable role in underwriting the cost of the 20 million new housing units—one-third of the total present supply—that have been built during the period.

The nation's major financial institutions—banks, life insurance companies and savings and loan associations—held nearly 145 billion dollars in 1-4 family home mortgage loans at the end of 1962. This represented one-fourth of their total assets. Clearly, the soundness of so substantial a holding as this is an important matter to these institutions and the economy generally. While up to the present there has been little indication of difficulties on a scale to merit general concern, the possibility that future troubles may be in the making is not to be lightly dismissed.

Loan to value ratios holding up in ~~the~~ housing, 1-12-71

— Bruce R.

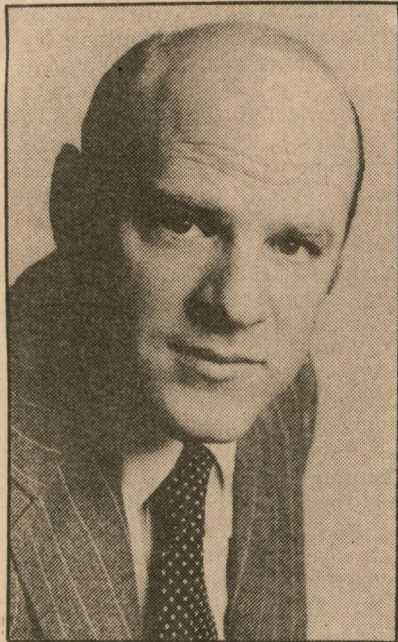
Around 72%, and rising, he thinks. He agrees that corp. credit ratings are watched much closer now.

I wonder why? Is housing ~~becoming~~ more secure b/c. of Fed. guarantees? Probably that's it.

Thus, housing is becoming a sink of capt.

Fox Moving to Raise Cash in Wake of Big Losses

By DALE POLLOCK and AL DELUGACH, *Times Staff Writers*



Barry Diller

In the wake of the massive loss it just reported for its most recent fiscal year, 20th Century Fox Film Corp. is moving quickly to raise cash for its ambitious plans to spend \$297 million on film and television production over the next year.

Mary Tyler Moore Enterprises Inc., the television production company responsible for "Hill Street Blues" and other shows, said Wednesday that it is in "serious" negotiations to buy Fox's 50% stake in the studio complex in Studio City that it owns jointly with CBS Inc. An MTM spokesman said he hopes the negotiations will be concluded by the end of the year but declined to give a possible purchase price.

Fox, which is owned by Denver oilman Marvin Davis, quietly dropped earlier plans to relocate its

main studio from its 63-acre site in West Los Angeles to the smaller CBS-Fox facility. That plan had been predicated on Fox's selling off or developing the valuable West Los Angeles property, a plan made impractical by high interest rates and zoning restrictions.

In a filing late last week with the Securities and Exchange Commission that disclosed an \$85-million net loss for the year ended Aug. 25, Fox indicated that it expects to raise cash by disposing of assets, attracting more outside investors for its movie productions and making a public offering of bonds or preferred stock.

But some observers predicted that a public offering of its own securities might not be easy, given current market conditions.

Some suggested that Fox could raise cash by selling a portion of the

successful CBS-Fox home-video operation through a public offering. That operation, which manufactures and markets videocassettes, is based in New York. A sale would require CBS' concurrence, and sources at the network indicated that such a move has not yet been discussed.

Meanwhile, on Wednesday, speculation throughout Hollywood centered on the motives of Davis and his new chairman, Barry Diller, for the sweeping write-downs on movie and TV productions that contributed to the huge loss in fiscal 1984.

The write-downs were alluded to briefly in Fox's new 10K annual report to the SEC but not detailed. The figures are lumped into the \$708.5-million operating expense, which was more than \$90 million

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alone. According to the indictment, Butcher used fraudulent and misapplied loans to take more than \$4.2 million from the banks.

Tamco said it filed a suit against City Investing.

City Investing's largest shareholder, Tamco Enterprises, said it filed the lawsuit against the diversified manufacturing, service and financial company in an effort to block a shareholders meeting next month called to vote on a plan to liquidate City Investing. Tamco, which owns 8.8% of City Investing's common stock, said the suit was filed in Delaware Chancery Court. The action also seeks to block the sale of three City Investing subsidiaries unless shareholders approve.

Grumman said it will quit the solar energy business in 1985.

The Bethpage, N.Y., aerospace firm said it will shift its Corcoran, Calif., plant where the solar energy products are made to increased production of aluminum canoes and truck bodies. As a result, the

After falling in the previous two months, the level of help-wanted advertising in the nation's major newspapers rebounded to levels attained in June and July, the Conference Board reported. The organization's seasonally adjusted index of help-wanted ads in 51 major newspapers rose to 136 in October from 129 in September and was up sharply from its year-earlier level of 111. The group said help-wanted advertising rose in all nine regions of the nation and was up 3.8% in the Pacific region.

Philip Morris will take a \$140-million write-down.

The nation's No. 1 cigarette producer said that it has been forced to write down the carrying value of its Miller Brewing Co. unit's idle Trenton, Ohio, brewery, cutting the company's fourth-quarter profit by \$140 million or about \$1.14 a share. The new brewery's opening has been delayed due to a general slump in consumer demand for beer and the increased efficiency of Miller's other plants, the company said. The

granted Dow the option to buy an additional 450,000 shares at the same price. The stock purchase will raise Dow's stake in Magma to nearly 20% from the current 16.8%. Magma said the proceeds will be used primarily to upgrade its geothermal power generating plant in the Imperial Valley.

Soviet oil production fell in October for the fourth month.

The Soviet Union also declared a *force majeure* on oil deliveries to contract customers at Baltic and Black Sea ports until further notice, meaning that the Soviets can't be held liable for failing to deliver oil under the contracts. The Soviets blamed the cutoff of exports on "a jump in crude oil and petroleum products consumption in domestic markets" and lower production due to bad weather. Soviet oil production averaged 12.13 million barrels a day in October, down from 12.19 barrels a day in September.

Mexico has made no decision regarding an IBM project.

Commerce Secretary Hector Hernandez Cervantes said a deci-

ment official as saying that IBM will be allowed 100% ownership of the proposed microcomputer plant.

The EEC said it is planning to retaliate against the U.S.

Etienne Davignon, the European Economic Community's industry commissioner, said a list of possible targets for EEC retaliation was being drawn up and soon would be submitted to the trading bloc's governing council of ministers. He did not specify the U.S. products that might be blocked. The retaliation will be in response to a temporary U.S. ban on imports of some European steel products.

Wheeling-Pittsburgh Steel will furlough 700 employees from its Monessen, Pa., plant until January . . . Beverly Hills-based **American Frontier Exploration** said that it may repurchase shares of its stock on the open market from time to time . . . **Ameritech**, a regional telephone company, said it will spend \$1.88 billion on improvements to its system next year, up 17.5% from this year.

FOX: Moves to Raise Cash

Continued from Page 1

above the previous year.

However, some details began to emerge Wednesday. The Times learned that two completed but unreleased films on which Fox said it had set up unspecified reserves in fiscal 1984 for "anticipated losses" are "Kidco" and "Gimme an F."

Interestingly, "Kidco" was produced by Frank Yablans—who became vice chairman of MGM/UA Entertainment Co. in February, 1983—when he was an independent producer.

Although described as unreleased, "Kidco" was briefly test-marketed last Easter and "Gimme an F" was shown in south Florida last weekend, but there are no current plans to release either on a wider basis, sources said.

Also contributing to the huge increase in operating expenses cited in the Fox report were higher write-offs on a number of feature films released in fiscal 1984, when the studio had few box-office hits, and reserves set up for abandoned feature film production costs.

Detailed figures were not given and the company would not elaborate.

Return Fox to Profitability

Industry observers pointed out the advantage that Diller receives by starting his tenure with a balance sheet cleared of some debris left by his predecessors. Diller became chairman and chief executive last month.

Diller's immediate task, however, is to return Fox to profitability—a job that will require time and lots of money.

"Diller is not enamored of pickups," said one executive, referring to Fox's reliance on films acquired for distribution from independent producers. "They've got to make their own movies, and movies cost money."

As chairman of Paramount Pictures for 10 years before joining Fox, the 42-year-old Diller relied on a mixture of high-profile, critically acclaimed films and low-brow commercial products, from "Terms of Endearment" to "Friday the 13th."

Diller and his production chief,

Lawrence Gordon, are expected to follow a similar formula at Fox—with the added burden of having to start almost from scratch. Only six film productions begun by the previous management team were continued on the fiscal 1985 books by Diller, the studio confirmed.

Fox also has trouble on the TV front, with only three prime-time series currently on the networks. A year ago, Fox had 6½ hours of programs on ABC, CBS and NBC.

The TV division has orders for only two mid-season pilots, a Fox spokesman said.

If Diller is to be successful, Fox will have to pump vast sums into film and TV development. The question in Hollywood is where that money will come from, given Fox's current financial straits.

Since buying the company in mid-1981 for about \$800 million, Davis and his former partner, fugitive oil trader Marc Rich, have taken \$538.6 million from Fox into their private holding company.

That total includes \$145 million in payments during fiscal 1984, when the studio's net worth plunged to \$67 million from \$301 million a year earlier.

"Maybe Marvin Davis is waking up," one executive from a competing studio said Wednesday. "He always figured to spin off the (film) library and the land. Now it looks like he'll have to do it, rather than just cash in."

Some Maneuvering Room

The fact that the commercial land market is in the doldrums and real estate speculators are now less interested in the Century City area, which is built on part of the old Fox lot, may leave Davis with few options.

However, Davis has some maneuvering room left with Fox's real estate holdings, which it owns in a 50-50 partnership with MKDG II, a group comprised of Davis and several of his Denver associates.

Currently under construction on the 63-acre studio lot is a 34-story office building designed for Fox staff and entertainment industry tenants. Also planned is a Marriott hotel, although no ground-breaking date has been announced.

Another possible source of new cash may be what is known in financial circles as "junk" bonds. In the spring of 1983, MGM/UA used a similar strategy of floating high-yielding bonds in a successful effort to reduce its heavy bank debt.

A Fox executive said he received calls from investment bankers early Wednesday and found them very receptive to the idea of such an offering.

Davis could also sell off some or all of Fox's common stock, enticing investors with the track record achieved by Diller at Paramount.

Still to be determined, however, is how well Diller and Davis will work together.

"Davis is no Kirk Kerkorian, who doesn't mix in," said one observer, referring to the majority stockholder of MGM/UA. "Davis sits in the middle of it."

Board Changes

One early indication of their working relationship may have been Davis' reported acquiescence to Diller's desire for a vastly reduced Fox board of directors. One studio insider characterized the former board as "little more than a dog-and-pony show."

Former President Gerald R. Ford and former Secretary of State Henry Kissinger were among the dozen or so directors dropped from the board in a manner described by one industry observer as "not a distinguished move and rather ineptly done."

The new five-member board consists of Diller; Davis; his son, John, a production executive at the studio, and two longtime Davis associates, lawyer Edward Bennett Williams and Denver executive Gerald Gray.

Another key factor in Fox's plans is the role of its banks. Fox's total bank debt has risen to \$363 million, compared to \$193 million a year earlier, and substantially all of its assets are posted as collateral.

Although the Fox report raised the possibility that it might not meet "certain covenants" in its bank credit agreement, based on currently anticipated spending and revenue, a company spokesman said Wednesday: "We have no covenants with the banks that will not be met."

11-16-84 LV-1

Occidental Drops Mideast Stock Offering

By PATRICK BOYLE,
Times Staff Writer

Occidental Petroleum Corp. said Thursday that it has given up its effort to raise \$215 million from Middle East investors to fund oil operations in the region.

The Los Angeles-based company said it ended its offering for Arab Oxy Inc., a stock issue that was to be sold only outside the United States. Occidental blamed "the tightening of liquidity in the Middle East" for the decision to cancel the offering.

The new Bahrain-based company was to have been 50% owned by Occidental, with all of Occidental's oil and gas properties in Abu Dhabi, Oman, Egypt, Tunisia, Pakistan and the Netherlands sector of the North Sea being transferred to the subsidiary.

The proceeds from the stock sale would have been used to finance drilling and production in those areas.

'Never Got Off the Ground'

One investment banking source said the offering, first announced last May, "never got off the ground."

He said the general economic problems sweeping the Middle East as a result of the softness in world oil prices made investors there unwilling to commit funds to the new venture.

"We just got a sense that this is a difficult time to be making such an offering," he said. "The concept was well received, but \$215 million is a lot of money."

Occidental President Ray Irani, a native of Beirut, had spent considerable time laying the groundwork for Arab Oxy before being named to his current job in August. However, sources said they didn't believe that the offering had been undermined when Irani quit devoting so much time to it after his promotion.

Occidental Chairman Armand Hammer said in a statement that Oxy plans to "continue its commitment to exploration and production of oil and gas in the Middle East" despite cancellation of the offering.