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Less Pressure on 1968 Credit Markets?

Natural Gas Today

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Federal Reserve Bank of Philadelphia



Less Pressure on 1968 Credit Markets?

. . . Spending plans and profit expectations for 1968 point to a letup in the credit market needs of major U.S. corporations.

Natural Gas Today

. . . Technological advancements and a continuing search for new applications bring renewed competitive vitality to a presumably mature industry.

Do treasurers' current financing plans spell . . .

LESS PRESSURE ON 1968 CREDIT MARKETS?

by **Kevin G. Woelflein**

Yes, is the consensus of treasurers of large corporations surveyed recently by the Federal Reserve Bank of Philadelphia.¹ Looking ahead, they see a favorable outlook for internal sources of funds mainly because profits are expected to increase sharply. But the treasurers are somewhat anxious about 1968 because of a lingering concern over liquidity. This could be a chief restraint on spending. According to the treasurers, business spending will be about the same in 1968 as 1967. The net effect, shown by the survey, will be to narrow the gap between internal sources and total uses of funds. This means that if events turn out as the corporate treasurers see them, the largest U.S. corporations will be seeking less funds from commercial banks and capital markets in 1968 than were raised in 1967.

Experimental survey used

While these overall results come as welcome news, especially for policymakers, several considerations must be borne in mind. First, the survey was quasi-experimental in nature. What made it unique was that respondents estimated percentages for each important item of sources and uses of funds. Dollar amounts were calculated when the results were processed.² Because the data and calculations are rough approximations, the numbers to follow are meant only to show order of magnitude and

¹ *The survey results were presented in a speech at the "Business in 1968" meeting of the National Industrial Conference Board in New York, October 3, by David P. Eastburn, Vice President of Research, Federal Reserve Bank of Philadelphia.*

² *See Technical Notes 3 and 4.*

direction. No greater precision is intended or warranted in this article.

For any corporate treasurer, it is difficult to estimate sources and uses or predict the level of interest rates five quarters in advance. At the present time, the difficulty is compounded by uncertainty concerning the war, the threat of wage and price inflation, and the possibility of higher taxes. We suspect that respondents had a particularly difficult time estimating their 1968 tax liability. Thus, retained profits could well be overstated.³ Any shortfall between internal funds and total uses primarily will increase corporate demands on money markets because liquid assets are at a relatively low level.

Secondly, the survey was done when most companies were still working on their 1968 budgets. It is doubtful that the cost impacts of rising material prices and wage hikes were fully reflected in the treasurers' answers.

Important companies responded

Nevertheless, nearly 400 companies, accustomed to the problems of sophisticated planning, responded to the questionnaire.⁴ These companies exert powerful economic force in the economy. In 1966, for example, they accounted for nearly one-half of plant and equipment spending of all U.S. corporations. And in the first nine months of 1967 they raised over \$6 billion in bond issues, nearly half the dollar volume of total bond issues

³ *See Technical Note 5.*

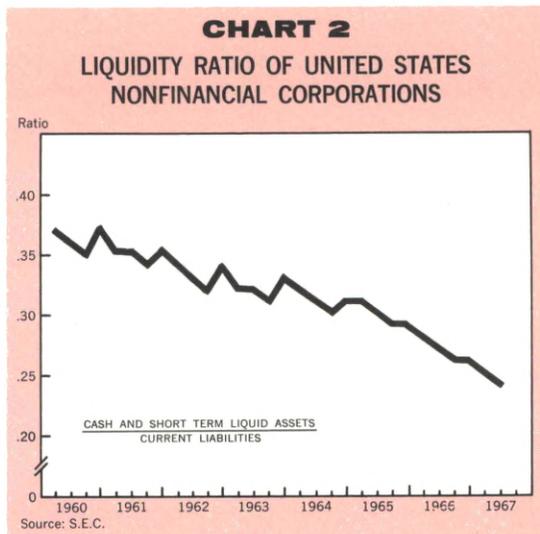
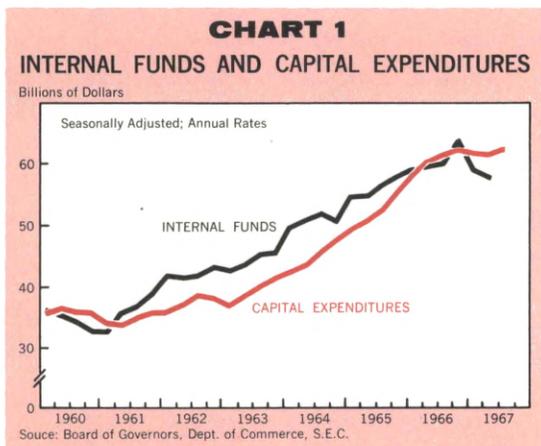
⁴ *See Technical Note 2.*

in that period. Therefore, their outlook and behavior in financial markets has dynamic effect also.

Internal funds dipped in 1967

The past 18 months have been rough on corporate treasurers. In 1966, when money grew increasingly scarce and more expensive, internal sources of funds and capital expenditures converged. Then, in 1967, internal funds fell sharply largely because of the combined pressure of a dip in profits and accelerated tax payments (Chart 1). For the first time in this expansion, internal funds were less than capital expenditures.

While internal funds exceeded capital expenditures from 1961 through 1965, corporations financed long-term investments internally and raised funds from banks and capital markets to finance inventories and receivables. Cash and near-cash assets were not avidly accumulated because adequate funds were available in financial markets. Consequently, corporate liquidity, as measured by the ratio of liquid assets to current liabilities, declined each year in this expansion (Chart 2). The 1966 and 1967 dip in internal funds occurred in a drastically changed environment. A quest for improved liquidity started in earnest during 1967.



Bond market squeezed in 1967

The combination of declining liquidity, accelerated tax payments, an unexpected rapid increase in inventory late in 1966, the widening of the unfavorable gap between internal sources of funds and capital expenditures and their experience with tight money the year before chased big company treasurers into the capital markets. They borrowed in unprecedented volume; some companies for the first time in a decade floated bond issues. The companies responding to the survey were typical. Nearly one-third of respondents issued bonds during the first nine months of 1967. According to them, about 65 per cent of the proceeds of these newly issued bonds was used to pay off debt or to acquire liquid assets (Chart 3). Furthermore, a separate analysis of those survey firms planning to issue bonds in 1968 shows the same general pattern will be followed.

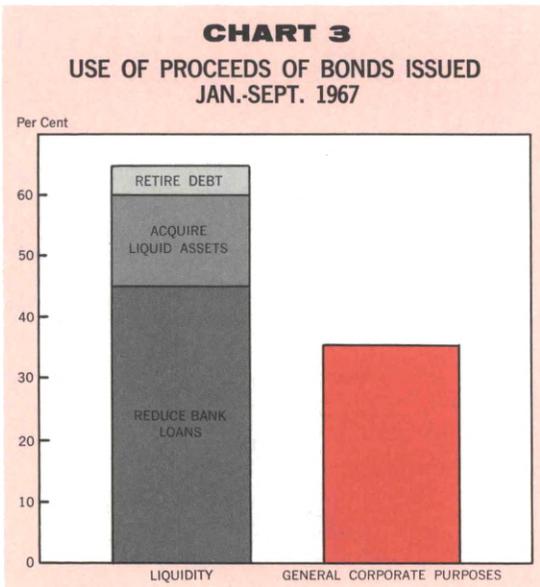
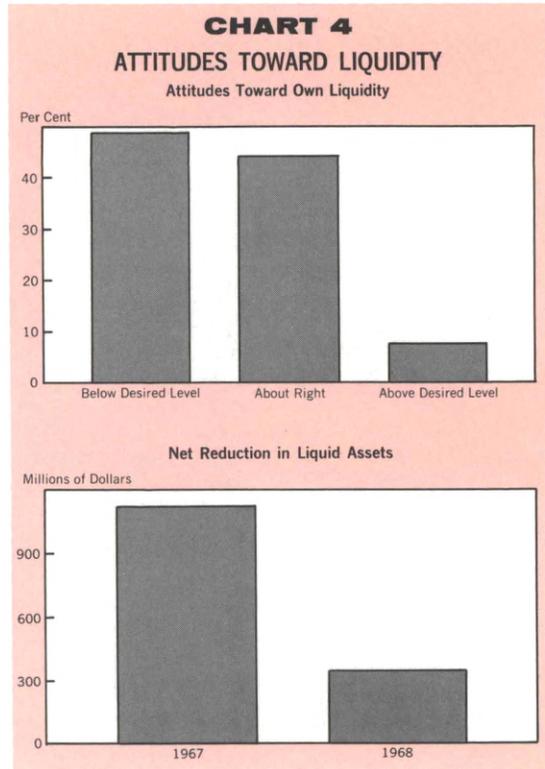
Apparently even this massive effort to improve liquidity was not enough to relieve treasurers' uneasiness about their needs in 1968. In September, corporate liquidity still was below desired levels, according to nearly half the respondents

(Chart 4). About the same percentage indicated they intend to strengthen their liquid position throughout 1968.

How liquidity will increase

The results of this survey show that the liquid asset position of these corporations in 1968 is unlikely to be much different than it is right now. In fact, a further net reduction, although much smaller than the 1967 amount, is planned for 1968 as shown in the bottom section of Chart 4. However, manufacturing firms expect to move from a net liquidation this year to slight accumulation next year. The survey further indicates that issuing new bonds is the first-choice method to increase liquidity. Running together in second place are long-term borrowings and increased retained profits. Gross profits of large corporations are expected to rise by 12 per cent. Taxes and dividends are also expected to go up but not so fast as profits.⁵ Consequently, the supply of internal funds is expected to be up about 16 per cent in

⁵ See Technical Note 5.



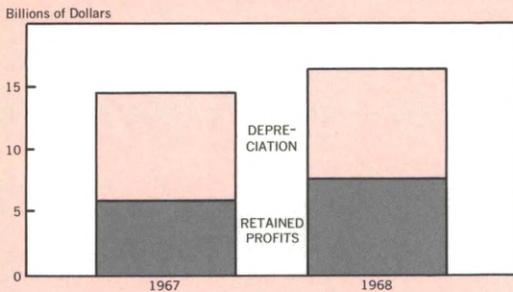
1968 (Chart 5, top section).

If corporate tills were flush with cash in 1968, they might be a source of demand for Treasury bills easing, financing of the deficit. Instead, improvements in liquidity are occurring by replacing short-term bank loans with longer-term debt. Thus, corporations are stretching out the average maturity of their debt, thereby increasing the corporation's ability to borrow.

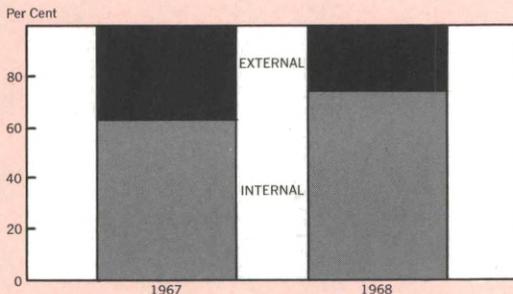
Spending plans near level

Corporate treasurers are not planning sharp spending boosts even though a significant increase in internal funds is anticipated next year. Expenditures for domestic plant and equipment are up about 2 per cent, according to respondents (Chart

CHART 5
SOURCES OF FUNDS
Internal Funds



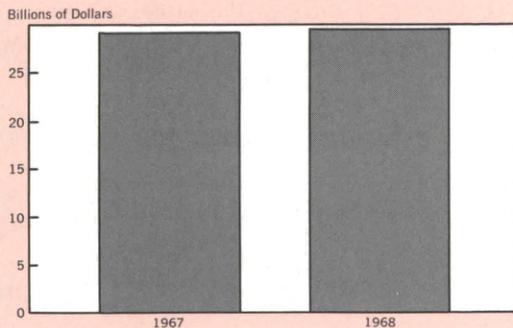
External and Internal Funds



6). Signs of a strong boost in inventory spending are not indicated either. Thus, total uses of funds in 1968 are expected to remain at about the same level as in 1967.

The combination of increased internal sources of funds and near leveling of total uses reduces the

CHART 6
CAPITAL EXPENDITURES

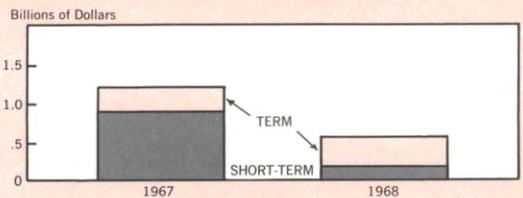


need for external sources of funds. The bottom section of Chart 5 summarizes the story. In 1967 these large companies raised 37 per cent of all funds externally; only 27 per cent will come from external sources next year if the treasurers' plans and expectations materialize.

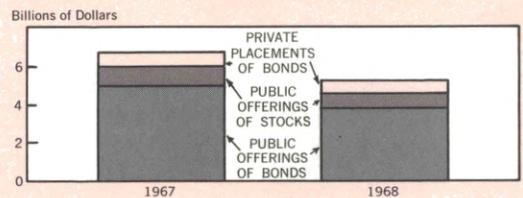
Credit market demands may ease

Some of the details are shown in Chart 7. Net bank borrowings by these largest corporations may increase in 1968. However, the increase is estimated to be less than half the gain posted in 1967. Almost all this change occurs in the slow-down of short-term borrowing. But the survey results revealed an interesting underlying current. Those corporations that issued bonds in the first nine months of 1967 are planning a net increase

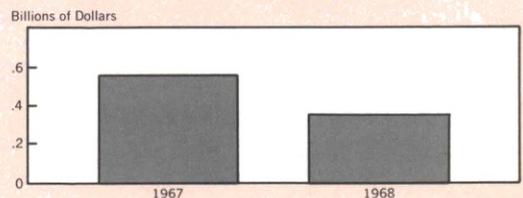
CHART 7
EXTERNAL FINANCING
Net Borrowing from Banks



Security Issues as Source of Funds



Commercial Paper Issued



in short-term borrowing in 1968. Those that did not issue bonds plan to raise money in capital markets next year and reduce net short-term bank loans. Consequently, a smooth and pervasive easing in short-term borrowing is not expected.

As the treasurers see it, pressure on the capital markets could ease also. Gross offerings of stocks and bonds are planned at more than 20 per cent below estimated 1967 levels. And the volume of new commercial paper issues may shrink in 1968 as well, according to respondents.

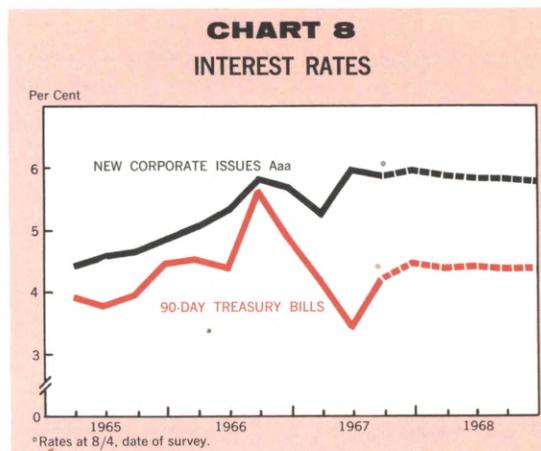
Tax surcharge anticipated

Corporate treasurers do not see increased taxes as a serious threat to liquidity. An 8 to 10 per cent tax surcharge, effective January 1, 1968, was assumed by 75 per cent. Over half the companies reported they would be able to make payment by drawing down liquid assets or increasing bank borrowing somewhat. Nearly 85 per cent said increased taxes would have no effect on spending plans.

High interest rates expected

Despite the treasurers' view that their own external financing needs will be less pressing in 1968, they believe interest rates will remain near present levels (Chart 8). The treasurers were asked to forecast sources and uses of funds for their *own* companies and interest rates for *over-all* credit markets. It is not inconsistent for them to feel that the total demand for money will keep rates high even though their own corporations' requirements will ease. The current news is electric with forecasts of high interest rates and talk of another money crunch in 1968. These psychological factors play some role in the thinking of important money men in big corporations. How much no one knows.

On the other hand, the situation approaching



1968 is quite different than that of a year ago. Banks are more liquid and this survey shows that the large companies have been tapping the credit markets largely to soothe corporate nerves.

Conclusions and conjectures

If these spending plans and profit expectations are achieved, commercial banks and the capital markets would be under less strain from the private sector in 1968 than they were in 1967. But the treasurers' expectations depend on a sharp rise in profits and only a modest increase in spending, thus reducing the need for external sources of funds. Both premises are debatable. Can price increases and productivity gains offset rising wages and increases in other costs? How long will corporations restrain spending if the economy moves ahead strongly and promises to continue doing so?

Two important indicators of economic activity support the treasurers' attitude about restrained spending. *Inventories* are still relatively high compared to levels existing before the 1966 inventory bulge. Thus corporations can spend conservatively for inventory until sales show more concrete evidence of spurting ahead.

Capacity utilization is not likely to rise much

in 1968 because of rapid increase in new capacity coming on stream. However, a 2 per cent increase in capital spending, estimated by survey respondents, would represent a slight decline in real terms, that is, after allowing for rising prices. Some up-

ward adjustments may occur as 1968 plans jell.

This survey does not prove how much business demands in the credit markets will ease in 1968. But it does light one candle in the darkness surrounding the outlook.

TECHNICAL NOTES

1. Date and Scope of Survey.

The objective was to determine 1968 financing plans of large corporations. Survey questionnaires were mailed August 21. Cutoff date for replies was September 15, 1967.

2. Sample and Respondents

	Sample No.	Replies
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Manufacturing		
Sales above \$800 million	100	77
\$400 - \$800	100	54
250 - 400	100	55
165 - 250	100	53
125 - 165	100	53
Merchandising	50	36
Transportation	50	21
Utilities	50	35
Total	650	384

Source: **Fortune** 500 manufacturing and 150 nonmanufacturing companies.

3. Consistent and reasonable Sources and Uses data provided by 228 respondents distributed as follows:

Manufacturing	76%
Merchandising	9
Transportation	4
Utilities	11
	<hr/>
	100%

4. Calculation of Sources and Uses

- a. Respondents provided dollar estimates of plant and equipment spending in 1967 and 1968.
- b. Respondents also provided percentage estimates of major items in Sources and Uses. The estimates added to 100 per cent for both Sources and Uses. Included in the table was the percentage of Total Uses for plant and equipment.
- c. Given both the dollar amount and the per cent of Total Uses for plant and equipment we solved for the dollar amount of Total Uses. We assumed Total Uses equaled Total Sources.
- d. Each percentage of Total Uses, given by respondents, was converted to dollars by multiplying by the calculated value of Total Uses. The same thing was done for each item in the Sources table.
- e. A summary of all respondents was prepared by accumulating the calculated dollar values from each company.

5. Internal Funds

\$ Billions	1967	1968	Per Cent Increase
Profits before tax	\$20.6	\$23.1	12%
Less: Taxes	8.4	9.0	7
Dividends	6.4	6.8	6
Retained Profits	5.8	7.3	26
Plus: Depreciation	8.3	9.3	12
Total Internal Funds	\$14.1	\$16.6	16%

NATURAL GAS TODAY

by **Evan B. Alderfer**

The Philadelphia Gas Works is digging a big hole in Northeast Philadelphia along the Delaware River. The purpose is the construction of an underground LNG (liquid natural gas) plant. Upon completion, the facility will have the capacity to store 4 billion cubic feet of gas in liquid form. That's enough fuel to keep Philadelphia comfortable for ten of winter's coldest days.

Ocean-going tankers are already carrying liquid natural gas from Algiers to London, and before long vessels laden with LNG loaded in Venezuela or other distant sources will be barging up the Delaware to the new plant of the Philadelphia Gas Works. There the fuel will be stored in its watery compactness for vaporizing in winter and warming thousands of Philadelphia homes.

When natural gas is cooled way down to minus 260 degrees Fahrenheit, over 600 cubic feet of gas can be crowded into one cubic foot of liquid. What a saving in storage space when the stuff is given this cryogenic treatment! Moreover, the underground facility does away with skyscraper gas tanks, which never did qualify as things of beauty.

Natural gas—colorless, almost odorless, and altogether shapeless—is an airy foundation for an industry alleged to be the country's sixth largest. That claim is based on the billions invested in stalking, capturing, and carrying the will-o'-the-wisp to its customers. As an industry, natural gas is hoary with age and aflame with youth.

It seems that natural gas first went into public service in 1824 as an illuminant at Fredonia, New York. When petroleum was discovered in western Pennsylvania, natural gas suffered from competition of the cheaper illuminant until invention of

the Welsbach mantle restored gas to its position of leadership. Ultimately, electric lights took over.

Meanwhile, Pittsburgh steel manufacturers found natural gas an excellent fuel to fire their furnaces. So did the glass makers and cement manufacturers. For a time, in the late 19th and early 20th centuries, natural gas as an industrial fuel flourished; but the flourishing was regional, local—confined to nearby pockets of gas deposits. When these petered out the consumers had to turn to other fuels. Yet as late as 1915 Pennsylvania and West Virginia were the two largest natural gas-producing states.

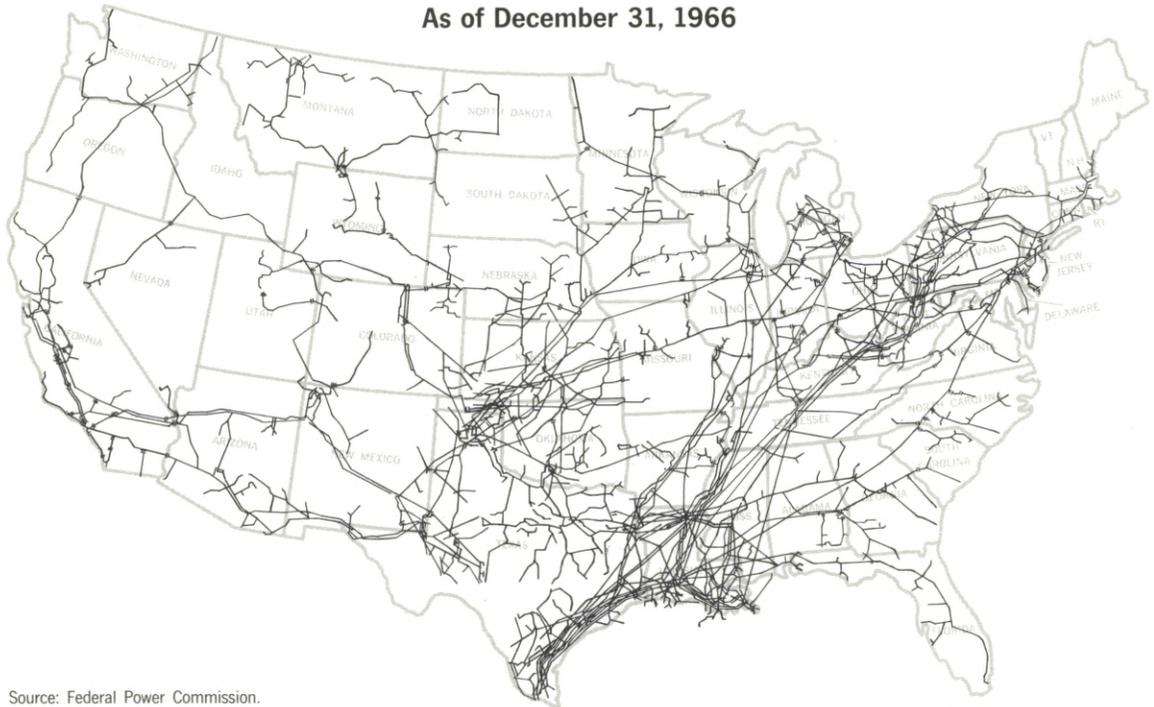
At about that time large natural gas deposits were discovered in Oklahoma and soon thereafter still larger deposits in Texas. Much of the Oklahoma gas was used to make gasoline to power automobiles, which had scarcely emerged from the horseless-carriage stage in both name and appearance.

The difficulty of transporting natural gas confined it to local markets until the steel industry developed welded steel pipe in the mid-twenties. Thereupon natural gas went to town and, as pipeline technology improved, huge gas mains up to two feet and more in diameter linked the big gas fields of Texas and the Gulf Coast to the big consuming markets along the Atlantic Seaboard and the Great Lakes region.

Arteries of energy

Transportation is one of the three major divisions of the natural gas industry and links the other two divisions, production and distribution. The industry's first long-distance pipeline (over 1,000 miles) was completed in 1931. Now the country

NETWORK OF MAJOR NATURAL GAS PIPELINES As of December 31, 1966



Source: Federal Power Commission.

is laced with about 800,000 miles of gas pipe. That figure includes the gathering lines which reach out like fingers into the oil fields, the main long-distance, heavy-duty trunk lines connecting the have with the have-not areas, and the distributing lines that reach out to the multitudes of consumers. The nature of the network is shown on the accompanying map.

Not shown on the map are the pumping stations every three- to five-score miles, depending on the terrain, to keep the gas moving. Nor does the map show the storage areas where summer surplus is accumulated for winter's heavy drain.

Prior to LNG most gas was stored either above ground in steel tanks or underground in abandoned gas or oil wells. And of course gas on the go through more than three-quarter-million miles

of pipeline is also "in storage," after a fashion.

Unlike railroad mileage which is over the hump and on the way down, natural gas pipeline mileage is still very much in the expansive stage. Construction last year was in excess of the distance around the globe. Rare is the pipeline company not engaged in digging trenches for new lines. Discovery of huge natural gas reserves in Alberta has stimulated pipeline construction in California and the North Central States to import Canadian gas.

Pipeline companies confine their operations to transport. They buy the gas from producers in one area and pump it through their lines for sale to distributors in another area. Of course there are exceptions. Some pipeline companies also engage in distribution and production.

ral gas was sought as eagerly as petroleum. Petroleum no longer stands in *loco parentis* to gas.

At the end of the line

To most of the industry's almost 39 million customers, gas is a blue flame under the frying pan and a monthly bill from the local gas works. Throughout the country there are 1,400 gas utility distribution systems. All are vigorously seeking larger markets, and many with considerable success.

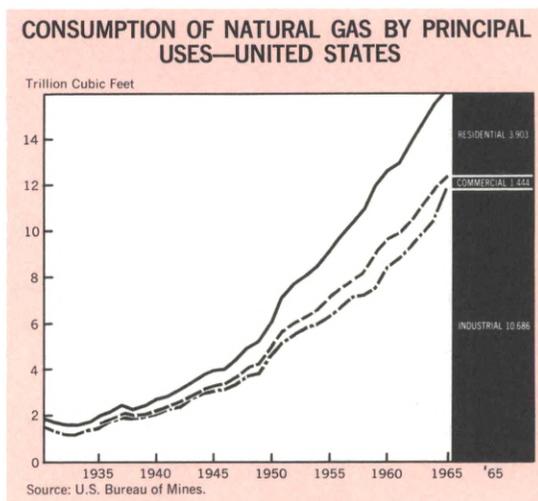
Not many years ago the majority of these distributors made some or most of the gas they sold from coal, coke, steam, or oil. Now natural gas is served to about 95 per cent of all gas customers. The utilities buy it from the pipeline companies and pipe it to their residential, industrial, and commercial customers.

And what momentous piping! The 16 trillion cubic feet sold by the utilities in 1965 was roughly the energy equivalent of the country's coal production that year. Industrial use accounted for over half the sales, residential use one-third, and commercial the remainder.

The largest industrial consumer is the electric generating industry—that part of it located in or near the gas fields. For them, gas obviously is the cheapest fuel to power their machinery. Field use stands second. Field use is gas used for oil and gas drilling, pumping, and other on-the-scene operations such as pumping gas into oil wells to force oil columns to the surface. The fact that Texas, California, and Louisiana are the leading consumers of natural gas reflects the importance of field use. Third in rank among industrial consumers is the chemical industry, especially the petroleum refining division of it. Other heavy industrial consumers are iron and steel; stone, clay, and glass; food, paper, and nonferrous metals. The prominence of steel and other heavy industries in Ohio, Illinois, and Pennsylvania largely

explains why they rate fourth, fifth, and sixth, respectively, in natural gas consumption.

Residential use of gas now accounts for one-third of the industry's sales in cubic footage and over half in revenue dollars. As early as the 1930's cooking with gas was as common as lighting with electricity. The widespread appeal for cooking with gas is its instant heat and cleanliness. Turn on the gas burner and before you can say abracadabra the coffee pot boils. Unlike the solid and liquid fuels, which leave ashes, or dust, or soot and smudge, natural gas leaves almost no



unwelcome trace behind. Moreover, gas imposes no burden of storage upon its customers. It just flows, burns, and goes.

Residential use of gas is not confined to cooking. It is used for water heating, space heating, refrigeration, clothes drying, air conditioning, and for gas lights and grills. Because of the popularity of gas lights to illuminate driveways, lawns, and patios there are now actually more gas lights in use than there were for all outdoor purposes in the "gaslight era" at the turn of the century.

Gas is a much-regulated industry. To have two or more companies laying pipes to distribute gas in a city would be a costly and useless duplication of facilities. Hence, the local governmental authority usually grants a franchise to one company, but for the monopoly privilege the company is subject to certain rules and regulations regarding such things as routing, rates, and valuation of plant. Then, too, the interstate aspects of gas transmission come under the jurisdiction of the Federal Power Commission.

Insatiable demand

Total gas consumption for all purposes—industrial, residential, and commercial—rose from 2 trillion cubic feet in 1935 to better than 16 trillion last year. An eightfold increase in one generation if not a phenomenal is certainly much more than a nominal rate of growth.

For space heating, many householders are switching from oil to gas which is calorific, clean, silent, always on tap; and gas installations have ever so few moving parts to go wrong. The shift from oil to gas in some sections of the hard-coal marketing area is reminiscent of the erstwhile shift from anthracite to oil. A curious development—gas and oil, geologic cohabiters, have become economic competitors!

Industrial and commercial use of gas is also growing in breadth and depth—new customers and new uses. Gas has long served the heavy fuel-consuming industries such as steel, nonferrous metals, glass, ceramics, cement, and chemicals but the list is being extended to include food processing, textiles, motor cars, and many others. Among new applications are gas-fueled air conditioning for commercial and industrial use, gas heat pumps for more efficient year-round climate control, incinerators, and gas engines and turbines. Gas may also find increased application as a substitute for coal in electric power plants

to reduce metropolitan air pollution.

Is there enough gas?

The national inventory of natural gas one authority estimates at 286 trillion cubic feet, almost half of it in Texas. At the current rate of withdrawal we would presumably run out of gas in about two decades. Another authority estimates our economically recoverable reserves at 1,700 trillion cubic feet—a goodlier heritage and no cause for worry, at least for many years.

This is neither the time nor the place to choose sides and engage in a debate over numbers. Unquestionably the country's gas reserves are expressible by a finite but hard-to-ascertain figure in the trillions. Whatever it is, we shall not be making ever-increasing draughts until D-day—the day of doom—and then shiver. A natural resource is not drained like a cup of water.

A likelierhood is that abundance gives way to scarcity by easy stages over a period of years, and the change will be reflected in rising costs and higher prices. Higher-priced gas will stimulate the development and use of other fuels that can be produced more economically, thus conserving the diminishing supply of gas for the special user that can afford its higher cost. Moreover, natural gas, like petroleum, is sometimes discovered in the most unexpected places. An example is the discovery of the huge Groningen gas field in the Netherlands in 1959, which has turned the North Sea into a happy hydrocarbon hunting ground. There, dozens of longlegged drilling craft are engaged in offshore exploration similar to the activity off the shores of Texas and Louisiana. In the United States the race between discovery and disaster is still in our favor.

What else is new

The new cryogenic technology enables a better adjustment of production to demand which is

highly seasonal. Winter consumption of gas is nearly double that of summer. More compact storage therefore permits substantial peak shaving.

In addition to ease of storage the new technology also offers ease of portage. Now that gas can be carried with much greater economy of space on seagoing vessels, it can be delivered to faraway markets. Originally confined to local markets, natural gas attained a national market with the help of long-distance pipelines and with cryogenic treatment, international markets. Henceforth, gas can compete more effectively with petroleum in world-wide markets. It should not be surprising to see more and more gas from remote areas entering the maritime channels of international trade. Increased imports of foreign gas into the United States may not be greeted with cheers by all branches of the domestic industry, but imports help to conserve our natural resources.

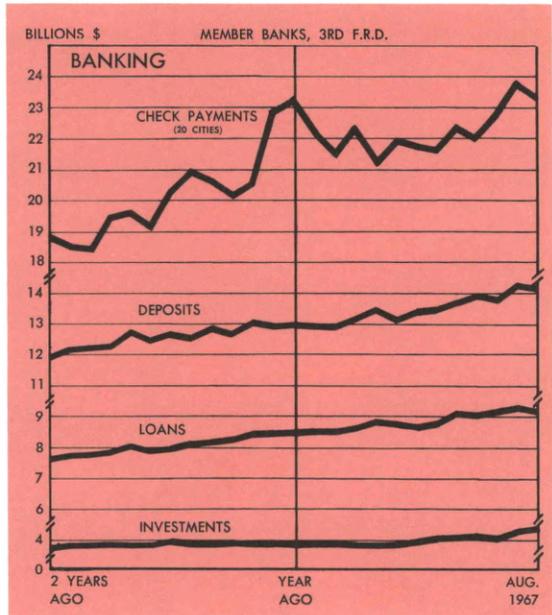
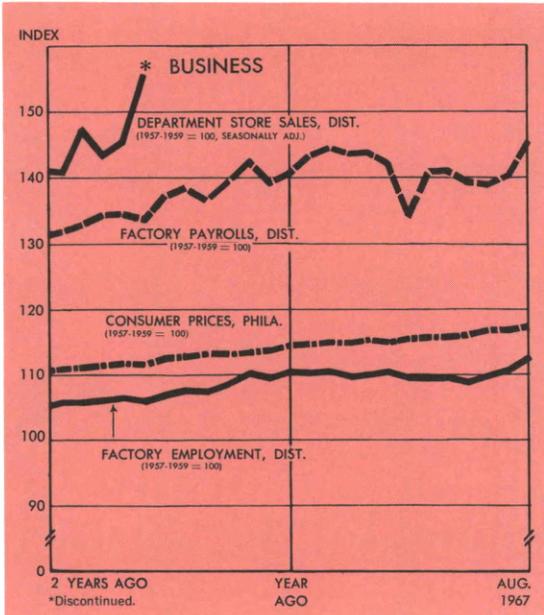
There are occasions when an industry, presumably technically mature, breaks out with a rash of new developments so as to give it a renewed lease on life. It may be a bit premature to cite natural gas as an example, but the industry

is actively engaged in research to find new uses for its product.

Mention has already been made of the use of gas for air conditioning, refrigeration, clothes drying, and related household functions. The industry is now exploring the possibilities of gas heat pumps for more efficient year-round climate control, wider use of gas-fueled engines and turbines, and direct application of gas in furnaces for smelting metals from ores.

Furthermore, a score of leading gas companies are engaged in a co-operative research effort to perfect a natural gas fuel cell. A fuel cell is an unpretentious mite of magic that delivers electrical energy directly from fuel gas through electrochemical reaction. This is in marked contrast to the conventional roundabout way of making electricity—burning a fuel to get the heat to produce mechanical energy to spin a generator to make electricity. Small fuel cells are already being used in outer-space-going craft. Some day such a gas-operated power plant may be tucked in a corner of the utility room to do all the domestic chores of the all-gas home.

FOR THE RECORD . . .



SUMMARY	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	August 1967 from		8 mos. 1967 from year ago	August 1967 from		8 mos. 1967 from year ago
	mo. ago	year ago		mo. ago	year ago	
MANUFACTURING						
Production			+ 5	0	+ 1	
Electric power consumed	+ 7	+ 1	+ 2			
Man-hours, total*	+ 3	- 1	- 3			
Employment, total	+ 1	+ 2	+ 1			
Wage income*	+ 4	+ 4	+ 2			
CONSTRUCTION**	-10	+16	+ 6	+ 5	+18	
COAL PRODUCTION	+30	- 4	- 1	+23	- 3	
BANKING						
(All member banks)						
Deposits	0	+ 9	+ 8	- 1	+ 8	
Loans	- 1	+ 8	+ 9	0	+ 5	
Investments	+ 4	+15	+ 5	+ 3	+15	
U.S. Govt. securities	+ 5	+ 8	- 3	+ 3	+11	
Other	+ 3	+23	+15	+ 2	+19	
Check payments***	- 2†	+ 2†	+ 6†	+ 6	+16	
PRICES						
Wholesale				0	- 1	
Consumer	+ 1‡	+ 3‡	+ 3‡	0	+ 3	

LOCAL CHANGES

Standard Metropolitan Statistical Areas*

	Manufacturing				Banking			
	Employment		Payrolls		Check Payments**		Total Deposits***	
	Per cent change August 1967 from		Per cent change August 1967 from		Per cent change August 1967 from		Per cent change August 1967 from	
	mo. ago	year ago						
Wilmington	+ 2	+ 4	+ 2	+10	- 8	-22	- 4	+ 6
Atlantic City					+ 6	+ 5	+ 4	+ 1
Trenton	- 1	- 6	+ 1	- 7	-10	+14	- 2	+16
Altoona	- 1	- 3	+ 2	- 4	+ 3	- 1	+ 2	+ 5
Harrisburg	0	- 1	+ 1	+ 6	+ 2	+ 7	+ 1	+13
Johnstown	+ 1	- 5	- 3	- 8	+ 2	0	+ 1	+ 8
Lancaster	+ 1	- 1	+ 3	- 1	+ 3	+ 1	+ 1	+ 7
Lehigh Valley	+ 3	0	+ 3	+ 4	- 1	0	+ 1	+ 8
Philadelphia	+ 1	0	+ 3	+ 2	0	+10	- 1	+10
Reading	+ 2	- 2	+ 3	+ 5	- 1	+ 3	+ 1	+10
Scranton	0	0	0	+ 7	-10	+10	+ 1	+11
Wilkes-Barre	+ 3	- 3	+ 4	+ 4	+ 2	+ 7	+ 1	+11
York	+ 3	- 1	+ 6	+ 6	0	+ 1	+ 1	+ 5

*Not restricted to corporate limits of cities but covers areas of one or more counties.

**All commercial banks. Adjusted for seasonal variation.

***Member banks only. Last Wednesday of the month.

†15 SMSA's
‡Philadelphia

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