

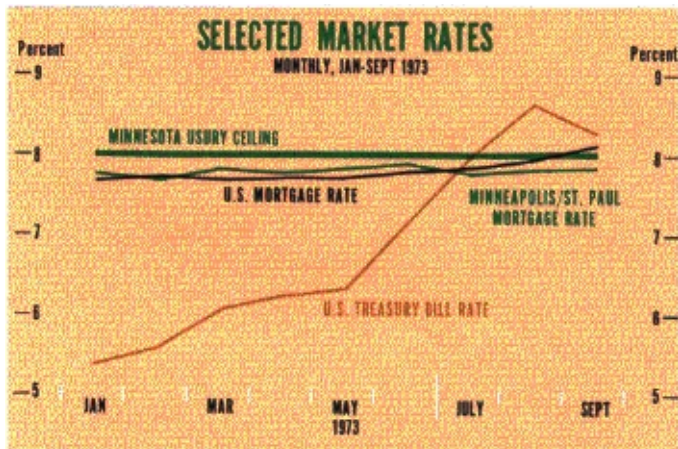
**Montana
North Dakota
South Dakota
Minnesota
Northwestern Wisconsin
Upper Michigan**

NINTH DISTRICT CONDITIONS **federal reserve bank of minneapolis**

FINANCE: S&Ls Weather the Storm

Developments since midsummer have placed considerable pressure on the financial system, particularly on savings and loan institutions (S&Ls). Rising interest rates caused a dramatic outflow of funds in August, while usury laws affecting mortgages compelled S&Ls in many states to commit available funds elsewhere.

Since S&Ls are heavily invested in mortgage lending, their funds are typically committed for relatively long periods to assets with fixed yields. In a time of stable interest rates, this is not of great concern. But recently interest rates have been rising. Short-term rates have generally exceeded longer-term rates throughout 1973. Because S&Ls must pay more to attract and retain deposits, they have been caught in a profit squeeze.



In addition, S&Ls are subject to a maximum interest rate they may pay on most savings accounts, currently 5.25 percent. This restricts their ability to compete for funds, and when other rates move higher, prudent depositors move their money elsewhere. As depositors withdraw money more rapidly than mortgages are paid off, S&Ls experience a cash shortage and must borrow to meet some of their obligations. During the summer, borrowing from the Federal Home Loan Bank, especially by Minneapolis/St. Paul S&Ls, increased spectacularly.

Since S&Ls cannot be certain of fund sources at times of net outflow, credit commitments must be stopped. This has happened nationally and locally.

SAVINGS & LOANS AT SAVINGS & LOANS **Seasonally Adjusted Annual Rates of Change**

	June	July	August	Sept.
Savings Capital				
Minneapolis/St. Paul	9.4	2.8	-3.6	1.8
United States	7.6	11.5	-2.7	5.2
Mortgages Outstanding				
Minneapolis/St. Paul	11.7	14.6	13.0	11.6
United States	14.4	13.3	11.0	7.3
Loan Commitments				
Minneapolis/St. Paul	-26.3	-54.5	-129.0	-112.1
United States	-5.5	-76.0	-62.5	-91.5
Borrowing				
Minneapolis/St. Paul	140.1	172.1	291.2	8.3
United States	70.7	128.6	98.2	8.9

The difficulties facing S&Ls were intensified by the July creation of "wild-card" certificates of deposit carrying no interest limits on four-year, \$1,000 minimum deposits. Since S&Ls risked a profit squeeze in competing for funds through this instrument, they held back, allowing commercial banks which were not so hard-pressed to issue these CDs more aggressively. Better "wild-card" rates at commercial banks may well have caused a flow of deposits from S&Ls.

A recent joint congressional resolution calling for interest rate ceilings on "wild-cards" has resulted in a 7.5 percent rate allowable for S&Ls and a 7.25 percent maximum for commercial banks. This may slow the flow of funds from S&Ls, but it may not relax the profit squeeze much. Minnesota S&Ls, for instance, would earn a maximum of one-half percent on new CD money lent out again in the state.

Emerging from a stormy summer, S&Ls look for brighter days ahead. Savings recovered slightly in September, and if interest rates continue to fall, S&Ls should re-establish financial competitiveness.

ENERGY: How Short Will We Be?

One of the biggest economic uncertainties facing both the district and nation this winter is the impact

of expected fuel shortages. Minnesota's Governor Anderson indicated in September that his state may be 137 million gallons short of fuel oil this winter. Natural gas supplies are dwindling and mandatory government controls are being used to allocate limited propane supplies. According to Department of Interior estimates, distillate supplies such as diesel fuel, jet fuel, kerosene and home heating oil will fall at least 100,000 barrels a day short of demand this winter if weather conditions are normal. (Much of the increased demand for distillates comes from industrial and electric utility users who have switched from natural gas which is running low and coal which is under an environmental ban.) Further complicating the energy supply situation, expansion of U.S. refinery capacity has not kept pace with growing demand.

As grim as this outlook is, unless several political, climatic and economic variables work out right, things could get worse. First, anticipated fuel imports—especially from important Middle Eastern sources—may not materialize. Second, a severe winter will increase distillate fuel demand. For every three degrees below normal the temperature drops nationwide, an estimated 75,000 barrels a day extra will be needed. Third, U.S. oil refineries have been running almost nonstop lately, foregoing normal maintenance and increasing the probability of unscheduled downtimes this winter.

Several steps have been taken and others are planned to ease expected shortages. Effective November 1, the Administration imposed a mandatory fuel allocation plan. As part of this plan, fuel wholesalers will receive 100 percent of the quantity purchased in 1972 or, if this quantity is unavailable, a proportional share of allocable supplies. State governments, given some control over fuel consumption in their states, may allocate up to 10 percent of their allotment for priority purposes. If some areas are particularly hard-hit by cold weather, the Interior Department can order fuel transferred from less frozen regions.

In addition to mandatory allocation, prices on various fuels may be permitted to rise to let market forces cut demand. The Cost of Living Council has already transferred price control authority for propane to the White House's Energy Policy Office.

Fuel conservation measures are also being encouraged to curb fuel demand. In a message urging fuel conservation, President Nixon indicated that if thermostats were set four degrees lower than normal, U.S. fuel oil consumption could be cut by 400,000 barrels daily. In the Ninth District, many school districts have already instituted or are considering fuel conservation programs.

Finally, emission standards may be eased to permit burning of higher sulfur fuels.

Because fuel oil supplies are subject to politics, economics and weather, it is very difficult to guess how large and serious anticipated fuel shortages will be. If the weather is favorable and programs to cut fuel consumption are successful, the nation may only be inconvenienced by the fuel shortage. If, however, the weather is unusually cold and/or foreign oil supplies are sharply reduced, fuel shortages could seriously curb domestic economic activity.

AGRICULTURE: The New Farm Bill

The 1973 Agriculture and Consumer Protection Act, signed into law in August, outlines farm programs in effect through the 1977 crop year.

Historically, farm output in America has increased faster than demand for farm goods, so farm prices and incomes have been under considerable downward pressure. To relieve this pressure, most government programs of the last 40 years have tried to restrict the supply of farm output.

The agricultural economy of 1973 differs radically from the historical situation of overcapacity. Despite record farm output, the index of prices received by farmers climbed to 191 by September 1973 from 129 only a year earlier (1967=100). The new farm policy legislation, responding to these changed economic conditions, encourages all-out production by farmers and yet cushions them against price declines by continuing commodity support prices.



The key concept in the new legislation is the "target price." Under the new law, the price of the supported commodity is pegged at a specific fixed level, the target price (equal to the distance OB in the graph). The market price under the new program is flexible, and if the market price determined by supply and demand is less than the target price, the government will make good the difference. (At a market price equal to OA in the graph, for example, the government will pay a per-unit subsidy to farmers equal to AB. The shaded area shows what the total

cost to the government would be under the program.) If the market price exceeds the target price, no government payments will be made.

Target prices established by the government are substantially above the average market prices of recent years but are far below the prices of recent months.

TARGET vs. MARKET PRICES

Commodity	Target Price Per Bushel	Average Market Price Sept. 15, 1973	Per Bushel 1967-72
Wheat	\$2.05	\$4.62	\$1.39
Corn	1.38	2.15	1.17
Barley	1.13	3.87	.99

Another provision of the new legislation is the "escalator clause." This is similar to the cost-of-living clauses frequently written into labor contracts and should help protect farmers against rapid inflation of production inputs. The escalator clause adjusts target prices in the 1976 and 1977 crop years.

As under the old program, crop land can be diverted from production if the Secretary of Agriculture determines that farm output is likely to be excessive. The new act also limits total payments to \$20,000 per person, changing the previous limit from \$55,000 per crop. Few farmers in the Ninth District will be affected by this change.

Whether market prices remain above target prices in future years will depend upon supply and demand. The 1973 inflation in farm prices has mostly been a demand phenomenon. Because such factors as future currency realignments and weather in other grain-exporting countries cannot be predicted, it is not certain whether this unparalleled demand will continue. However, we can suggest two possibilities that would foster specific farm policies under the new act.

First, suppose that demand stays at its current level. Prices of farm products will remain above their targets, and no direct payments will be required. Little land will be diverted from production, and the farm economy will be essentially a free-market economy.

Second, suppose that demand falls off and market prices drop below their targets. In this case, the direct payment provision of the program will become operational. Producers will receive the target price on all output, but some of their total receipts will consist of government subsidies. And if direct payments threaten to become excessive, the Secretary of Agriculture may choose to divert acreage from production under the set-aside provision of the program. This program would then be quite similar to those of recent years.

The impact of the program on district farmers is difficult to determine at this time. However, if farmers get at least the target price, total cash marketings

from crops should exceed \$3 billion in 1974. This compares with an annual average of \$1.83 billion from 1970-72. Even if farmers receive no government payments under the new program, their total cash receipts should be substantially greater than in recent years. Moreover, barring adverse weather or other disasters, farmers are virtually guaranteed this level of return in 1974.

Optimism Sells Tractors

Unit sales of farm machines in the Ninth District are up sharply from 1972 and are also running ahead of average sales for the 1968-72 five-year period. This high rate of machinery investment is being bolstered by record farm incomes and the widespread belief that favorable prices will continue.



Tractor sales during January-August 1973 totaled 11,276 units in the district's four full states, for increases of 33.1 percent over 1972 and 35.9 percent over the 1968-72 average. Typically there are two seasonal peaks in tractor sales: one prior to spring planting in April or May and the other during the October harvest. In 1973, the spring peak came in April when 2,466 tractors were sold. This was the largest monthly total in years. A good fourth quarter could push total 1973 sales as high as 17,000 units.

Total combine sales for January-August 1973 were running 80 percent ahead of 1972. However, 1972 was a depressed year for combine sales, and the 1973 increase over the five-year average is a smaller 12 percent. The seasonal peak in combine sales has probably already occurred in the wheat-producing areas of the region; in North Dakota, for example, twice as many were sold this August as last August. If 1973 follows the seasonal pattern, combine sales in the corn and soybean regions will peak in October.

Sales of cornheads for the January-August period were up 13 percent over a year ago and 26 percent from the five-year average. Sales of hay balers have gained less than 1 percent, probably because of summer droughts in some regions.

NINTH DISTRICT production and employment

I N D I C A T O R		UNIT	1973		1972	Percent Change
			SEPTEMBER	AUGUST	SEPTEMBER	SEPT.-SEPT.
MEASURES OF PRODUCTION AND FACTOR INPUTS TO PRODUCTION	Total Industrial Production*					
	Electrical Energy Consumption: Mfg. and Mining ¹	Index, sa	n.a.	145	137	
	Production Worker Manhours: ¹	Index, sa	n.a.	n.a.	102	
	Manufacturing	Index, sa	n.a.	n.a.	104	
	Mining	Index, sa	n.a.	n.a.	90	
	Total Construction Contracts Awarded	Million \$, sa	n.a.	201.7	285.7	
	Residential Buildings	Million \$, sa	n.a.	90.0	82.1	
	Nonresidential Buildings	Million \$, sa	n.a.	51.5	133.9	
	All Other Construction	Million \$, sa	n.a.	60.2	69.7	
	Bldg. Permits: New Housing Units ²	Number	2,293	3,296	3,955	-42.0
MEASURES OF MANPOWER UTILIZATION	Civilian Work Force ³	Thousands, sa	2,736p	2,711	2,656	+ 3.0
	Total Civilian Employment	Thousands, sa	2,596p	2,574	2,502	+ 3.8
	Number Unemployed	Thousands, sa	140p	137	154	- 9.1
	Unemployment Rate ³	Percent, sa	5.1p	5.0	5.8	-12.1
	Average Weekly Hours in Manufacturing ³	Hours, sa	41.3e	41.0e	41.0	+ 0.7
EMPLOYMENT BY INDUSTRY SECTOR	Wage and Salary Employment, Nonfarm ³	Thousands, sa	2,101p	2,096	2,011	+ 4.5
	Manufacturing	Thousands, sa	398p	394	377	+ 5.6
	Mining	Thousands, sa	31p	31	29	+ 6.9
	Construction	Thousands, sa	96p	95	95	+ 1.1
	Transport., Comm., & Public Utilities	Thousands, sa	139p	138	131	+ 6.1
	Trade	Thousands, sa	519p	520	498	+ 4.2
	Finance, Insurance & Real Estate	Thousands, sa	98p	97	94	+ 4.3
	Service Industries	Thousands, sa	377p	377	358	+ 5.3
	Government	Thousands, sa	443p	444	429	+ 3.3
MEASURES OF SPENDING	Total Retail Sales*					
	New Passenger Car Registrations	Thousands, sa	n.a.	n.a.	n.a.	
	Bank Debits ⁴	Billion \$, saar	303.6	299.4	217.7	+39.5

NOTES

- e—Partially estimated; not all data available
- n.a.—Not available
- p—Preliminary; subject to revision
- r—Revised
- sa—Seasonally adjusted
- *—District and U.S. data not comparable
- saar—Seasonally adjusted annual rate

FOOTNOTES

1. Index: 1967 Base Period; Weights: 1967
2. A sample of permit-issuing centers
3. Excluding Northwestern Wisconsin
4. Six standard metropolitan statistical areas
5. A sample of centers blown up to represent total permits issued
6. 226 standard metropolitan statistical areas, excluding the seven leading centers

NINTH DISTRICT income and finance

I N D I C A T O R		UNIT	1973			1972	Percent Change
			OCTOBER	SEPTEMBER	AUGUST	SEPTEMBER	SEPT. -SEPT.
MEASURES OF CONSUMER INCOME & FINANCIAL POSITION	Total Personal Income*						
	Nonagricultural Personal Income*						
	Average Weekly Earnings in Manufacturing ¹	Dollars	n.a.	172.62e	168.84e	162.17	+ 6.4
	Consumer Installment Credit Outstanding ²	Million \$	n.a.	n.a.	1,995	1,772	
	Time and Savings Deposits at Member Banks	Million \$	8,461	8,297	8,319	7,051	+17.7
	Savings Balances at Savings & Loan Assoc. ³	Million \$	n.a.	5,613	5,554	5,027	+11.7
	Cash Farm Receipts ³	Million \$	n.a.	n.a.	860	536	
MEASURES OF FINANCIAL CONDITION OF MEMBER BANKS	CITY BANKS ^{4,5}						
	Adjusted Loans and Discounts ⁶	Million \$	3,957	3,917	3,897	3,188	+22.9
	Commercial and Industrial Loans	Million \$	1,773	1,780	1,780	1,420	+25.4
	Real Estate Loans	Million \$	695	690	678	595	+16.0
	Gross Demand Deposits	Million \$	2,293	2,129	2,042	2,141	- 0.6
	Time Deposits	Million \$	2,521	2,455	2,504	1,923	+27.7
	U.S. Government Securities	Million \$	368	358	354	419	-14.6
	Other Securities	Million \$	982	895	922	782	+14.4
	COUNTRY BANKS ^{4,7}						
	Loans and Discounts	Million \$	5,867	5,788	5,778	4,877	+18.7
	Gross Demand Deposits	Million \$	3,025	2,897	2,847	2,586	+12.0
	Time Deposits	Million \$	5,938	5,841	5,813	5,128	+13.9
	U.S. Government Securities	Million \$	1,016	1,018	1,011	1,127	- 9.7
	Other Securities	Million \$	1,950	1,888	1,860	1,622	+16.4
MEASURES OF RESERVE POSITION AND "LIQUIDITY" OF MEMBER BANKS	Total Reserves ⁸	Million \$	796	783	767	798	- 1.9
	Required Reserves	Million \$	792	778	762	792	- 1.8
	Excess Reserves	Million \$	4	5	5	6	-16.7
	Borrowings from FRB	Million \$	18	31	38	3	+933.3
	Ratio of Loans to Total Deposits—City Banks ⁴	Percent	85.9	86.9	87.6	79.0	+10.0
	Ratio of Loans to Total Deposits—Country Banks ⁴	Percent	65.5	66.2	66.7	63.2	+ 4.7
MEASURES OF PRICE LEVELS	Consumer Price Index—Minneapolis ^{9,10}	Index	n.a.	n.a.	n.a.	n.a.	
	Prices Received by Farmers—Minnesota ⁹	Index	n.a.	200	231	128	+56.2

NOTES

e—Partially estimated; not all data available
n.a.—Not available
p—Preliminary; subject to revision
r—Revised
sa—Seasonally adjusted
*—District and U.S. data not comparable
saar—Seasonally adjusted annual rate

FOOTNOTES

1. Excluding Northwestern Wisconsin
2. All commercial banks; estimated by sample
3. Excluding Northwestern Wisconsin and Upper Michigan
4. Last Wednesday of the month figures
5. Selected banks in major cities
6. Net loans and discounts less loans to domestic commercial city banks
7. All member banks, excluding the selected major city banks
8. Average of daily figures of the four or five weeks ending on Wednesday which contain at least four days falling within the month
9. Index: 1967 Base Period
10. Quarterly

UNITED STATES income and finance

Percent Change SEPT. -SEPT.	1973			1972	UNIT	I N D I C A T O R	
	OCTOBER	SEPTEMBER	AUGUST	SEPTEMBER			
+11.1	n.a.	1,057.2p	1,047.3	951.3	Billion \$, saar	Total Personal Income	MEASURES OF CONSUMER INCOME & FINANCIAL POSITION
+10.5	n.a.	1,020.8p	1,012.1	923.6	Billion \$, saar	Nonagricultural Personal Income	
+ 7.0	168.09p	169.33p	164.43	158.26	Dollars	Average Weekly Earnings in Manufacturing	
	n.a.	n.a.	67.4	57.6	Billion \$	Consumer Installment Credit Outstanding ²	
+18.9	n.a.	279.0	278.5	234.7	Billion \$	Time and Savings Deposits at Member Banks	
+11.3	n.a.	222.6	220.8	200.0	Billion \$	Savings Balances at Savings & Loan Assoc.	
	n.a.	n.a.	7.4	5.4	Billion \$	Cash Farm Receipts	
+23.0	n.a.	259.6	256.8	211.0	Billion \$	CITY BANKS ^{4,5}	MEASURES OF FINANCIAL CONDITION OF MEMBER BANKS
+25.1	n.a.	108.3	106.9	86.6	Billion \$	Adjusted Loans and Discounts ⁶	
+20.0	n.a.	52.9	51.9	44.1	Billion \$	Commercial and Industrial Loans	
+ 3.4	n.a.	151.1	143.5	146.1	Billion \$	Real Estate Loans	
+22.1	n.a.	190.9	190.8	156.3	Billion \$	Gross Demand Deposits	
-15.6	n.a.	22.2	22.1	26.3	Billion \$	Time Deposits	
+ 4.6	n.a.	57.2	56.4	54.7	Billion \$	U.S. Government Securities	
						Other Securities	
+16.7	n.a.	94.4	93.8	80.9	Billion \$	COUNTRY BANKS ^{4,7}	
+ 5.6	n.a.	56.8	56.2	53.8	Billion \$	Loans and Discounts	
+12.5	n.a.	88.2	87.7	78.4	Billion \$	Gross Demand Deposits	
- 6.4	n.a.	16.1	16.1	17.2	Billion \$	Time Deposits	
+ 9.7	n.a.	33.9	33.6	30.9	Billion \$	U.S. Government Securities	
						Other Securities	
+ 3.3	n.a.	34,065	33,670	32,988	Million \$	Total Reserves ⁸	MEASURES OF RESERVE POSITION AND "LIQUIDITY" OF MEMBER BANKS
+ 3.2	n.a.	33,812	33,531	32,757	Million \$	Required Reserves	
+ 9.5	n.a.	253	139	231	Million \$	Excess Reserves	
+229.1	n.a.	1,853	2,154	563	Million \$	Borrowings from FRB	
+ 9.3	n.a.	80.3	81.4	73.5	Percent	Ratio of Loans to Total Deposits—City Banks ⁴	
+ 6.4	n.a.	65.1	65.1	61.2	Percent	Ratio of Loans to Total Deposits—Country Banks ⁴	
+ 7.4	n.a.	135.5	135.1	126.2	Index	Consumer Price Index ⁹	MEASURES OF PRICE LEVELS
+48.1	n.a.	191	207	129	Index	Prices Received by Farmers ⁹	

SOURCES

PERSONAL INCOME: U.S. Department of Commerce, Bureau of Economic Analysis

AVERAGE WEEKLY EARNINGS: Michigan, Minnesota, Montana, North Dakota, and South Dakota Employment Security Departments; U.S. Department of Labor, Bureau of Labor Statistics

COMMERCIAL BANK FINANCIAL DATA: Federal Reserve Bank of Minneapolis; Board of Governors of Federal Reserve System

SAVINGS AND LOAN DATA: Federal Home Loan Bank Board

CASH RECEIPTS FROM FARM MARKETINGS: U.S. Department of Agriculture

CONSUMER PRICE INDEX: U.S. Department of Labor, Bureau of Labor Statistics

PRICES RECEIVED BY FARMERS: U.S. Department of Agriculture; Minnesota Farm Price Report

UNITED STATES production and employment

Percent Change SEPT.-SEPT.	1973		1972	UNIT	I N D I C A T O R	
	SEPTEMBER	AUGUST	SEPTEMBER			
+ 8.3	127.4p	126.5	117.6	Index, sa	Total Industrial Production	MEASURES OF PRODUCTION AND FACTOR INPUTS TO PRODUCTION
+ 5.1	103p	102p	98	Index, sa	Electrical Energy Consumption: Mfg. and Mining*	
+ 5.1	103p	102p	98	Index, sa	Production Worker Manhours: ¹	
+ 5.1	103p	107p	98	Index, sa	Manufacturing	
+ 1.1	8,303.1	9,283.1	8,212.4	Million \$, sa	Mining	
- 9.8	3,623.5	3,782.8	4,019.0	Million \$, sa	Total Construction Contracts Awarded	
+15.5	2,708.2	3,026.1	2,345.0	Million \$, sa	Residential Buildings	
+ 6.7	1,971.4	2,474.2	1,848.4	Million \$, sa	Nonresidential Buildings	MEASURES OF MANPOWER UTILIZATION
	n.a.	n.a.	191.5	Thousands	All Other Construction	
					Bldg. Permits: New Housing Units ⁵	
+ 2.7	89,403p	88,651	87,066	Thousands, sa	Civilian Work Force	
+ 3.5	85,127p	84,434	82,256	Thousands, sa	Total Civilian Employment	
-11.1	4,276p	4,217	4,810	Thousands, sa	Number Unemployed	
-12.7	4.8p	4.8	5.5	Percent, sa	Unemployment Rate	
	40.8p	40.5	40.8	Hours, sa	Average Weekly Hours in Manufacturing	
+ 3.6	75,972p	75,747	73,316	Thousands, sa	Wage and Salary Employment, Nonfarm	EMPLOYMENT BY INDUSTRY SECTOR
+ 4.2	19,876p	19,861	19,069	Thousands, sa	Manufacturing	
+ 4.5	633p	634	606	Thousands, sa	Mining	
+ 4.0	3,694p	3,676	3,551	Thousands, sa	Construction	
+ 2.8	4,632p	4,617	4,507	Thousands, sa	Transport., Comm., & Public Utilities	
+ 3.8	16,393p	16,352	15,794	Thousands, sa	Trade	
+ 3.1	4,077p	4,064	3,953	Thousands, sa	Finance, Insurance & Real Estate	
+ 4.4	12,996p	12,906	12,451	Thousands, sa	Service Industries	
+ 2.1	13,671p	13,637	13,385	Thousands, sa	Government	
+10.9	41.8	42.2	37.7	Million \$, sa	Total Retail Sales	MEASURES OF SPENDING
	n.a.	1,024.6	810.4	Thousands, sa	New Passenger Car Registrations	
+25.2	5,692.6	5,825.3	4,546.5	Billion \$, saar	Bank Debits ⁵	

SOURCES

INDUSTRIAL PRODUCTION: Board of Governors of Federal Reserve System

ELECTRICAL ENERGY CONSUMPTION: Federal Reserve Bank of Minneapolis

PRODUCTION WORKER MANHOURS: Federal Reserve Bank of Minneapolis

CONSTRUCTION CONTRACTS AWARDED: Board of Governors of Federal Reserve System; F. W. Dodge Corporation

NEW HOUSING UNITS AUTHORIZED: Federal Reserve Bank of Minneapolis; U.S. Department of Commerce, Bureau of Census

EMPLOYMENT, UNEMPLOYMENT, AND HOURS: Michigan, Minnesota, Montana, North Dakota, and South Dakota Employment Security Departments; U.S. Department of Labor, Bureau of Labor Statistics

RETAIL SALES: U.S. Department of Commerce, Bureau of Census

NEW PASSENGER CAR REGISTRATIONS: Automotive News Magazine

BANK DEBITS: Board of Governors of Federal Reserve System

A Short, Funky and Probably Incomplete Primer

There sure are a lot of construction statistics. Data exist for construction put in place, contract awards, housing starts, mobile home shipments, housing unit completions and new homes sold and for sale with further breakdowns as to residential, nonresidential, nonbuilding, public and private. To compound the confusion, data may be seasonally adjusted, unadjusted or presented at seasonally adjusted annual rates, and they may vary by aggregation, collecting agency or quality. In an effort to shed some light on this awesome array, we offer the following primer.

Chapter I. Elemental Definitions

Private and public construction — Distinguished by ownership rather than source of funds. Public refers to governmental agency or community ownership.

Residential — Single- and multifamily dwellings. May be categorized by number of families in a building or by FHA and VA programs. A residential or housekeeping unit represents one house, room or group of rooms occupied by one "family." A specific series may include "nonhousekeeping units" such as dormitories, hotels and motels. Be wary of this.

Nonresidential — Includes commercial buildings, religious and educational structures, warehouses, factories, etc.

Nonbuilding — A catchall for anything not in the previous two. Includes highways, canals, runways, nonstructural recreational facilities, dams, public utilities, etc. Another warning: sometimes these are lumped with nonresidential data. Keep on your toes.

Location — Usually available for states or cities, sometimes for smaller localities, and also for farms or nonfarms. No one is quite sure, though, what qualifies as a farm.

Seasonal adjustment — An attempt to correct for such seasonal patterns as the increase of construction activity in the warm months and decrease in the cold months. Don't be duped; changes that appear significant may only be seasonal. But when an increase or decrease appears in adjusted data, by golly, that means something!

Seasonally adjusted annual rates — Indicate how things would look at the end of the year if they keep going at this month's pace. Thus, you might read that the seasonally adjusted annual rate of housing starts is 200 million units, when the number of starts for the present month is only 17 million or so. Got it?

Chapter II. Sink or Swim

We will next plumb the depths of a few of the more popular construction series.

Fasten your life jackets, the seas get rougher.

First, not all series classify things alike. In one case you may find farm and non-farm breakdowns, but in another public and private. If you are interested in a specific item, don't switch to another series because it probably won't be there. And even if it is, the numbers would never, never agree anyway; this is the law.

Second, not all series define things alike. In some cases, nonbuilding and non-residential construction are lumped together. It's a fairly safe bet that if non-building is not shown singly, at least part of it's included in nonresidential or in "other." Another example: nonhousekeeping units are included in the series "Construction Put in Place," but not in "New Housing Starts."

Third, don't expect this month's data to be ready at the end of the month, or at the end of next month, or . . . We call this a lag. It takes time to gather the data, compile it, analyze and fiddle around with it and finally publish it. And more likely than not, the latest data will be branded with a "p" for "preliminary," so you won't know whether to believe it or not.

Fourth, never accept the data as sacred. It is subject to more errors than imaginable, although the errors are minimized when series are properly designed.

Chapter III. Construction Put in Place

This little gem is supposed to represent the dollar value of construction actually erected on the site each month. It indicates the current strength of the industry. However, it is dependent on prior, not present, commitments and fails to show how close a project is to completion. Consequently, it is not a useful predictor. Nor is it a measure of all construction activity, since maintenance and repair are excluded. The series looks at dollar value, so don't try to estimate physical volume from it without adjusting for cost and productivity changes. Within its limitations, though, this series is useful.

Chapter IV. Contract Awards

This dandy records new awards made to contractors during the month and breaks them down by residential (including nonhousekeeping), nonresidential and nonbuilding. Large awards are reported individually. It lists number of projects (dwelling units for residential building), square feet of building space and dollar valuation. It conveys quite a bit of info about future projects, but since the lag between contract awards and construction starts varies, you can't know just when a project will start employing resources. Some projects awarded

may never be started. News reporting services gather some of the data, so it may not be accurate.

Chapter V. Housing Starts

For residential building buffs only, this series shows the number of new housekeeping units started each month. It presents data on housekeeping units and excludes hotels, dorms, transient accommodations and mobile homes. Data are classified as public or private, FHA, VA and nonfarm or farm, depending on the intended use of the land. It's usually seasonally adjusted and often given in seasonally adjusted annual rates.

Because housing starts indicate current residential building, they are a key guide for national housing policy. However the series is prone to sampling error and may even be understated because not all areas issue building permits. Furthermore, it depends on prior commitments, so it's not too useful in predicting future housebuilding. Nevertheless, it paints a very good picture of current building. Remember, though, that units represented here will not be completed and occupied for some time.

Chapter VI. Building Permits

For this sweetheart monthly data is compiled from selected permit-granting centers only, so district totals are likely to be somewhat understated.

The series classifies permits as residential or nonresidential and gives number of permits, housing units (including mobile homes) and valuation. Detailed data for various states, metropolitan areas and certain counties are also shown. Highway building is excluded from this series.

The lag between issuance of permit and start of construction is small, so the series is a good proxy for starts. The same limitations that apply to housing starts apply here. However, data for this series is generally available within 30 days after the end of the month. If used carefully, it can tell how the local construction industry, especially the housing component, is doing.

Chapter VII. Whatsit All Mean?

Well, dear reader, the lesson to be learned is that statistics are useful if you know their limits and purposes. Because they're important, housing data are probably better developed and more accurate than other series. Nevertheless, caution is in order here too. If you're looking for precision, don't bother with construction numbers. But if you're content with reasonable impressions of the general direction of the industry and its components, these statistics can be a fair guide.