

Research Department
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Mother Nature on Strike

Along with the Blizzard of '88 (1888, that is), the Big Freeze of '77 will be long remembered in folk mythology as one of the nation's most memorable physical disasters. Yet opinion remains divided over how long-lasting its economic effects will be. Some observers believe that the freeze will affect the economy in the same way as the OPEC price-rise/oil-embargo; others believe that its impact will be closer to that of a major strike. The distinction is important, because the economy generally has recovered quickly from strikes, whereas it sank into a deep recession following the oil shock of 1973. (Of course, other factors also contributed to that recession.) To date, the shock of the freeze mostly resembles the shock of a major strike—Mother Nature on strike, as it were. In dealing with this type of supply shock, normal policy instruments generally are not very helpful.

The damage indeed has been severe. Thousands of plants were shut down in the nation's heartland as the cold stalled all types of transport and the natural-gas shortage closed off gas supplies to factories and commercial establishments. Forced shutdowns caused the auto industry to reduce production schedules by almost 150,000 cars and trucks. At the peak in early February, weather-caused layoffs added about 1.8 million to the un-

employment rolls. There were relatively few beneficiaries of all this havoc, aside from Arab oil producers, Mexican vegetable growers—and perhaps Japanese TV set producers, since shut-in Americans spent a record 7.2 hours daily in front of their TV sets during this period.

Frozen assets

The commercial-banking sector was affected in various ways by the freeze, apart from all the operational problems caused by weather. Consumer borrowing, a major source of strength in late 1976, had been expected to accelerate in early 1977, but now this is much less certain. Recent layoffs have reduced consumer income and willingness to borrow, and this uncertainty could persist until workers begin receiving overtime checks in the post-freeze recovery period. And as long as consumer spending lags, the long-expected improvement in borrowing for business inventories should be delayed. Also, the weather-related worsening of inflationary expectations could again delay the long-awaited rise in business borrowing for capital spending.

To some extent, though, the bad weather has created its own loan demand. Firms forced to close by severe weather may need to beat a path through the snow to their

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banks to replenish cash positions, and also to get funds to meet their mid-March corporate tax payments. (These payments should be larger than usual anyway, in view of the 1976 shortfall in business tax payments.) Some individuals and smaller businesses also may be seeking emergency credits because of their weather-caused problems. Still, any significant rise in bank borrowing may have to await the projected post-freeze recovery in business activity.

Frozen foods—and gas

The weather disaster has severely affected Florida's agricultural sector, and the losses there may not be offset by gains in other growing areas because of the impact of the Western drought. By some estimates, Florida could lose 30-35 percent of what would have been a bumper citrus crop, and as a result, wholesale prices of frozen orange-juice concentrate have already risen 12.5 percent. A number of vegetable crops were almost lost to the freeze, causing prices to rise 30 to 50 percent. But these increases may be temporary, and prices could drop back to their original levels by April as replanted crops begin to appear in the markets.

The weather impact on the energy sector has been felt most severely in the form of a natural-gas shortage, which had been anticipated anyway because of the price ceilings affecting deliveries between gas producing and consuming states. The crisis

led to the passage of the Emergency Natural Gas Act, which was designed to meet the needs of high-priority users in shortage areas by facilitating the transfer of supplies from surplus areas. Under this legislation, the Administration can allocate available supplies among different areas of the country, and can permit emergency purchases at above-ceiling prices. But domestic and foreign producers have already contracted for most of their limited supplies, so the effects of the legislation on supply and price may be minimal.

The increased demand for alternative fuels in this situation could exert additional pressure on fuel-oil and coal supplies, although many users would have trouble making the switch to these fuels. Meanwhile, refineries may have to devote an abnormally high proportion of their output to heating fuels in the next several months, and this could create a gasoline shortage in the summer-driving season, leading to new price pressures in that important market.

The energy legislation may solve some of the problems of high-priority users, such as households and institutions, but it doesn't solve the problems created by recent factory shutdowns. Indeed, some emergency gas shipments will have to be used to replenish severely depleted reservoirs, to prevent even worse shortages next year. Without a marked improvement in the weather in coming weeks, the

problems of industrial users could continue.

Nature on strike

All these pieces of evidence suggest that the economy has undergone a severe shock—but a shock on the supply side, not the type of demand-side shock that would result from a major shift in fiscal or monetary policy. The shock to supply has been likened either to an OPEC-style embargo/price hike or to a major strike—a crucial distinction, because of the qualitative and quantitative differences between the two. Major strikes have differed substantially from the OPEC's 1973 actions, which led to a major transfer of real wealth from oil-consuming to producing nations, and which thus contributed to the severity of the 1974-75 downturn. Also, each type of shock generally has involved an increase in the relative prices of important factors of production, but no major strike has yet caused a permanent loss of productive capacity comparable to that from the oil-shock—that is, no strike has caused a quadrupling of wages in an entire industry. In these respects, then, the effects of the big freeze are most closely akin to those of a big strike.

Several major strikes have occurred in basic industry during the past several decades—the coal strike of 1949, the steel strike of 1959, and the General Motors strike of 1970. The overall impact of the first two is difficult to evaluate; both had been long anticipated, so that firms

stockpiled a great deal of material in advance, and then went through a prolonged period of liquidation after each event. Less of this occurred on the occasion of the GM strike, and that event thus provides us with a better chance to evaluate the output/employment effects and the rate of recovery from a sudden supply shock.

Partly because of the GM strike, real GNP dropped at a 3.9-percent annual rate during the fourth quarter of 1970, but then rose at a 9.2-percent rate during the following quarter. Within two months of the end of the strike, the national economy recovered all of the lost retail sales and about 90 percent of the layoffs associated with the strike.

No lingering supply constraints resulted from the GM strike, whereas the recent cold snap could lead to a continued problem with natural-gas supplies, because of depleted reserves and reduced pipeline pressures. Aside from that, our analogy suggests that most of the losses from cold-induced stoppages will be made up during the second quarter of this year, provided of course that weather patterns return to normal. During the spring months, a recovery from the first-quarter shortfall, plus the current growth in demand, should generate a temporarily high rate of growth. If that is true, there would be little reason for extra financial stimulus beyond the amount currently contemplated.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT (Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 2/02/77	Change from 1/26/77	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	92,901	+ 809	+ 5,023	+ 5.72
Loans (gross, adjusted)—total	71,512	+ 1,751	+ 6,442	+ 9.90
Security loans	1,533	+ 260	+ 655	+ 74.60
Commercial and industrial	22,956	+ 270	- 506	- 2.16
Real estate	21,745	- 5	+ 2,122	+ 10.81
Consumer instalment	12,377	+ 41	+ 1,684	+ 15.75
U.S. Treasury securities	8,511	- 875	- 1,592	- 15.76
Other securities	12,878	- 67	+ 173	+ 1.36
Deposits (less cash items)—total*	91,731	- 28	+ 3,437	+ 3.89
Demand deposits (adjusted)	25,960	+ 305	+ 2,677	+ 11.50
U.S. Government deposits	299	- 90	- 371	- 55.37
Time deposits—total*	64,062	- 405	+ 1,692	+ 2.71
States and political subdivisions	5,968	+ 39	- 1,345	- 18.39
Savings deposits	30,837	- 33	+ 6,655	+ 27.52
Other time deposits‡	25,277	- 343	- 2,797	- 9.96
Large negotiable CD's	9,009	- 429	- 4,244	- 32.02
Weekly Averages of Daily Figures	Week ended 2/02/77	Week ended 1/26/77	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	+ 1	+ 65	+ 77	
Borrowings	1	8	8	
Net free(+)/Net borrowed (-)	0	+ 57	+ 69	
Federal Funds—Seven Large Banks				
Interbank Federal fund transactions				
Net purchases (+)/Net sales (-)	- 95	+ 688	+ 1,358	
Transactions with U.S. security dealers				
Net loans (+)/Net borrowings (-)	+ 135	+ 188	+ 227	

*Includes items not shown separately. ‡Individuals, partnerships and corporations.

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