

Federal Reserve
Bank of
San Francisco

May 6, 1983

3 for the Economists

Economists are frequently criticized for their inability to forecast the effect of changes in government fiscal and monetary policy, but their good track record in predicting the effect of *microeconomic* policy change is often overlooked. In hindsight, economists have been quite successful in prescribing regulatory or market structure changes for individual markets and these changes have resulted in the more efficient use of resources and in markets that serve the consumer better. Yet economic theory and public policy often remain at odds. Three major cases in point involve the petroleum, airline, and trucking industries. In each, economists had prescribed substantive changes in government policy and quite accurately anticipated the beneficial effects.

Petroleum

When the oil embargo by the Organization of Petroleum Exporting Countries (OPEC) produced shortages and sharply increased world petroleum prices in 1973, the resulting public outcry led U.S. policy makers on a decade-long exercise to control energy prices and supply allocations. Under Phase IV of the general wage and price control legislation and the Emergency Petroleum Allocation Act of 1973 (EPAA), Congress pegged the price of "old" oil at its May 1973 level and allowed only "new," "released," and "stripper" oil to be sold at the higher world price.

Economists at that time criticized the policies for their counterproductive effects on domestic demand and supply. They felt that the artificially low prices would impede conservation efforts and stifle domestic production. In essence, the controls were likely to exacerbate the price and availability problems facing oil consumers. Economic theory also argued that OPEC, like all cartels, was inherently unstable, and that allowing price competition would be the fastest way to weaken OPEC's ability to coordinate production and price.

Such admonitions were largely ignored in favor of more politically expedient controls on the oil industry. The philosophy of the EPAA was extended by the Energy Policy and Conservation Act of 1975 (EPCA). That Act was also designed to protect the public from the effects of rising oil prices.

EPCA was due to expire in September 1981, but President Reagan ended oil price controls on January 1 of that year although the existing windfall profits tax remained. The evidence from the post-decontrol period supports the previously ignored views of energy economists. First, while U.S. oil production in comparison to OPEC production had fallen during the control years, it began to rise rapidly after decontrol raised producer prices. Second, since decontrol, conservation efforts have produced an economy that is 5 percent less energy-intensive and a reduction in imports of foreign oil by nearly one-third.

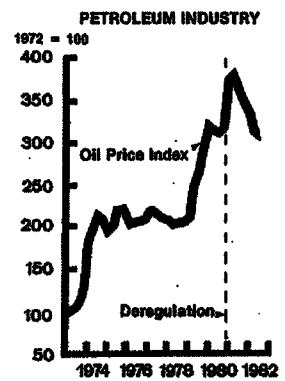
These effects and those of a worldwide recession on oil demand have created an oversupply of crude oil that has significantly weakened OPEC's control over oil prices. Despite cutbacks in production of nearly 50 percent since 1981, the major OPEC members have been unable to maintain their benchmark price of \$34 per barrel. Recently, OPEC was forced to cut its benchmark price by \$5 per barrel (to \$29), the first price cut in the cartel's 22-year history. Whether OPEC will actually cease to be effective in maintaining prices remains to be seen, but developments in the oil markets since decontrol are strong testimony to the economists' logic of mobilizing the forces of the marketplace to economize on a scarce resource, stimulate supply, and undermine anti-competitive supply cartelization.

Airlines... regulation

The regulatory distortions in the economic environment of the the airline industry were

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at least as comprehensive and certainly of longer standing than those in the oil industry. The airline industry was first subject to major economic regulation with the passage of the Civil Aeronautics Act in 1938. The Act empowered a federal Civil Aeronautics Authority (CAA) to regulate interstate fares, the number of certified carriers on each interstate route, and the pattern of routes served.

It became apparent to industrial economists that the implementation of this regulatory authority by the CAA and its successor agency the Civil Aeronautics Board (CAB) had created an inefficient air transport industry. First, by regulating fares to ensure that the typical trunk-line carrier would be able to meet its average costs, the CAB reduced incentives for individual carriers to contain costs. The regulated fares were computed by averaging operating costs of *all* carriers. Thus any one carrier could rely on subsequent adjustments to regulated fares to compensate them for higher costs.

Second, since the regulations did not allow airlines to compete on the basis of price, they tried to compete in services offered (in flight frequency, aircraft size and service to remote communities). As a result, the average load factor (proportion of occupied seats) was very low, even on trunk routes. For example, when carriers were scrambling for market share after the introduction of jets in the 1960s, average load factors fell from an already low 57 percent in 1967 to only 47 percent in 1971.

Economists concluded that the regulated interstate airline industry was generally offering an inefficient combination of high fares and excess capacity. Empirical evidence from the largely unregulated *intra*-state California and Texas markets, where rates were considerably lower for comparable distances and aircraft were used more intensively, backed them up. Indeed, on routes where the regulated interstate carriers competed head-on with intrastate

carriers, the interstate airlines routinely lost money on routes that were very profitable to more efficient intrastate carriers. For example, in 1970 on the busy San Francisco-Los Angeles corridor, PSA (an intrastate carrier) was able to enjoy a high rate of return while larger interstate trunk carriers complained that the route was not profitable.

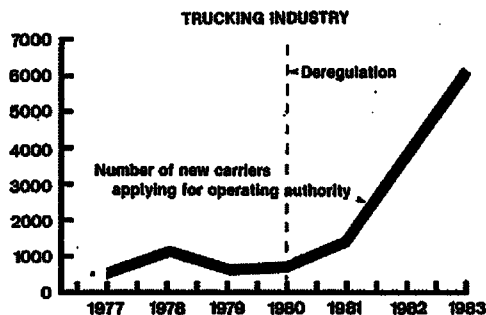
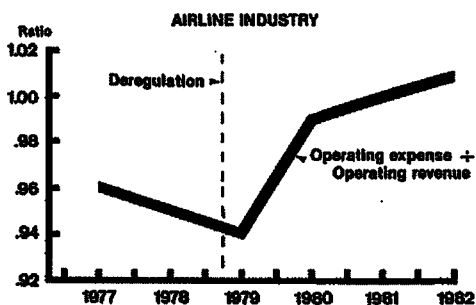
... deregulation

Major relaxation of economic regulation did not occur until the Airline Deregulation Act was passed in 1978. Today, airlines are relatively free to set fares and choose the routes they wish to serve. There is aggressive discounting on major routes, and fares have fallen in comparison to costs even on an industry-wide basis; although operating expenses rose by 77 percent between 1976 and 1980 (largely because of fuel costs), average passenger revenues rose by only 51 percent in the same period. Aircraft use has increased from load factors of 48.5 percent to 58.6 percent in the same period, as competition forced airlines to use their capacity more efficiently.

Passengers on coast-to-coast trunk routes have benefitted especially from price competition, but travelers on many smaller routes are enjoying more benefits too. Contrary to the early predictions of critics of deregulation, loss of service by major carriers usually was replaced by service from smaller commuter carriers. For example, a recent survey of 72 communities where major carriers had terminated service, showed that flight frequencies increased by 30 percent between 1978 and 1981 due to an increase in commuter carrier services. A final testimony to the success of deregulation is that few carriers have pressed for the return of regulation despite the tough recessionary conditions that coincided with deregulation.

Trucking

The trucking industry, like the airline industry, was regulated in response to concerns about "destructive competition" during the



Depression era. Regulation continued because of fears that deregulation would encourage the entry of many small carriers into the industry, trigger uneconomic rate-cutting and destabilize the industry.

Economists argued that the trucking industry was a model of perfect competition: the industry had low barriers to entry and many sellers offering similar services. They were, therefore, critical of the authority given the Interstate Commerce Commission (ICC) in 1935 by the Motor Carrier Act to control entry and set rates.

The ICC instituted a complex system of operating authorities that controlled how commodities could be transported as well as the types of customers that could be served. This detailed regulation caused inefficient utilization of capacity. For example, some carriers were authorized to haul less-than-truckload (LTL) freight while others could carry only full truckloads (TL). Because of the difficulty of assembling two-way TL service, many return hauls were made with empty trucks. An ICC study found 35.4 percent of private carrier truck capacity miles to be empty in 1976. Additional inefficiency resulted from route patterns mandated by the ICC that forced truckers to take indirect routes that did not match traffic patterns.

These restrictions on entry and the regulation of rates conferred large economic rents on carriers with operating authority. The American Trucking Association, for example, estimated that prior to deregulation the market value of operating rights (which could be bought and sold) was between 15 and 20 percent of annual revenue for large carriers, a reflection of the anticipated excess profits to be enjoyed.

Reform finally came during the Carter Administration with the Motor Carrier Act of 1980 (MCA). The Act relaxed entry restrictions, greatly broadened the scope of business for each class of carrier and gave carriers flexibility in setting their own rates.

The most obvious effect of this relaxed regulation was on rates. Although no simple measure of overall rate levels is available, the ICC found a strong downward trend in rate filings after deregulation. One large carrier, for example, simply cut its rate 10 percent across the board. In addition, there was a 322-percent increase in the number of new carriers applying for operating authority between 1980 and 1982. Further testifying to the pro-competitive effects of the MCA is the fact that carriers' operating rights now have virtually no market value. Also, as in the case of the airline industry, new, more efficient carriers have stepped in to provide comparable quality service on less popular routes dropped by other carriers. A recent ICC study of 1,200 shippers in small communities showed that the communities have felt no adverse change in either the availability or the quality of service.

Conclusion

The good record in the three industries described does not mean that all of microeconomic analysis leads to unambiguous policy prescriptions; certain market structures (for example oligopoly) present challenges to economists in understanding the behavior of firms and in defining appropriate public policy strategies. Nevertheless, the record suggests that we look again at some of the more "radical" notions of microeconomists currently being ignored, such as educational vouchers to stimulate competition and innovation in primary and secondary education, and pricing (rather than regulation) of pollution. But the attitudes of policy-makers are slow to change. Even the beneficial effects of the deregulation of petroleum prices have not changed political opposition to deregulation of natural gas prices. The record suggests that it may be time to give economists and their micropolicy recommendations their due.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 4/20/83	Change from 4/13/83	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	164,548	683	5,394	3.4
Loans (gross, adjusted) — total#	143,143	418	5,282	3.8
Commercial and industrial	44,979	222	2,216	5.2
Real estate	57,076	19	13	0.0
Loans to individuals	23,609	90	282	1.2
Securities loans	3,044	- 152	904	42.2
U.S. Treasury securities*	8,127	- 93	1,762	27.7
Other securities*	13,278	358	- 1,650	- 11.1
Demand deposits — total#	41,529	- 385	1,968	- 5.0
Demand deposits — adjusted	28,883	- 335	763	2.7
Savings deposits — total†	66,034	- 395	34,656	110.4
Time deposits — total#	66,880	- 277	- 23,848	- 26.3
Individuals, part. & corp.	59,902	- 62	- 21,489	- 26.4
(Large negotiable CD's)	20,182	- 452	- 12,865	- 38.9
Weekly Averages of Daily Figures	Week ended 4/20/83	Week ended 4/13/83	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (-)	62	89		35
Borrowings	12	0		198
Net free reserves (+)/Net borrowed(-)	51	89		- 163

* Excludes trading account securities.

Includes items not shown separately.

† Includes Money Market Deposit Accounts, Super-NOW accounts, and NOW accounts.

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