

Research Department
Federal Reserve
Bank of
San Francisco

September 21, 1979

The Formula

The widely heralded confrontation between General Motors and the United Autoworkers turned out to be one of the major non-events of the year. For the first time in fifteen years — that is, five bargaining cycles — the key union-industry agreement was signed without a strike. The agreement contained a substantial 34-percent wage increase over the next three years, plus more time off for workers, more pay for pensioners, and some improvements on non-economic issues.

The 1979 settlement represents another link in the chain which goes back to the path-breaking GM-UAW settlement of 1948 — an agreement designed to bring equity and stability into the auto industry's wage-determination process. That goal has been achieved, but the GM-UAW pattern may also have aggravated the wage-price spiral of the 1970's, because of the nature of the wage formula underlying the agreement, and of course because of the demonstration effect of this major industry contract upon the entire economy.

Labor expert A. H. Raskin explains this inflationary cost problem in terms of a nearly unstoppable "wage express." Writing in *Fortune* (July 3, 1978), he says, "It is powered by a 'made-in-Detroit' formula that for three decades has been regarded as the most progressive move ever taken toward injecting science and equity into the haggle-master theatrics of wage bargaining." That 1948 formula contains two basic ingredients — an annual "improvement" factor of 3 percent to give workers a fair share of the long-term increase in national productivity, plus a cost-of-living escalator that automatically lifts hourly pay in step with inflation.

Productivity impact

Consider first the productivity-related segment of the formula. In the U.S. economy, the wage bill typically accounts for more than two-thirds of total corporate costs. Labor

costs per unit of output can remain stable, with no impact on business prices, if workers' productivity advances at the same pace as their wages. That pattern accorded with reality for several decades after 1948, but not during the past decade. Indeed, in the first half of 1979, labor compensation per hour increased more than 10 percent (annual rate) while output per hour actually declined — and the resultant 13-percent annual rate of increase in unit labor costs severely aggravated the ongoing inflation.

How can the growth in unit labor costs be moderated? It would be unrealistic to expect a substantial slowdown in the growth of labor compensation, certainly as long as the GM-UAW formula continues to generate automatic increases in wages. The more promising avenue is to work with the other blade of the scissors — that is, to boost overall productivity again to the 3-percent annual-growth trend of earlier decades. The task is not insuperable, as is sometimes claimed. For example, the passage of time seems to be bringing about a more productive labor force. The products of the postwar baby boom, much to their parents' amazement, have now been transformed into a reasonably mature and productive set of workers.

But those workers aren't likely to live up to their potential without an expansion of spending on new business investment, especially in view of the fact that the newest plants and pieces of equipment are always the most productive. Thus, critics are now demanding that Congress liberalize depreciation allowances and adopt new tax incentives to help boost the business-investment share of GNP, which has been running only at about 9 to 10 percent of GNP. That figure is several percentage points below earlier U.S. peak levels, and even farther below the share of GNP which the Germans (15 percent) and the Japanese (20 percent) devote to plant-equipment spending.

F R B S F Weekly Letter

Research Department
Federal Reserve
Bank of
San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, nor of the Board of Governors of the Federal Reserve System.

Escalator impact

The second part of the historic GM-UAW formula — the cost-of-living adjustment (COLA) provision — has become increasingly popular with the growing prevalence of inflation. About four million workers were covered by escalator clauses in major bargaining agreements during the inflationary period of the late 1950's. The number dropped to less than two million during the early 1960's, but later accelerated with inflation, rising to four million in the early 1970's and to more than five million today. (The total number covered in all industries now approaches nine million.) At one time or another, unions in steel, railroads and electrical equipment dropped COLA coverage, but all resumed coverage again during the recent inflation. Roughly three-fifths of all workers under major three-year contracts are covered by COLA clauses.

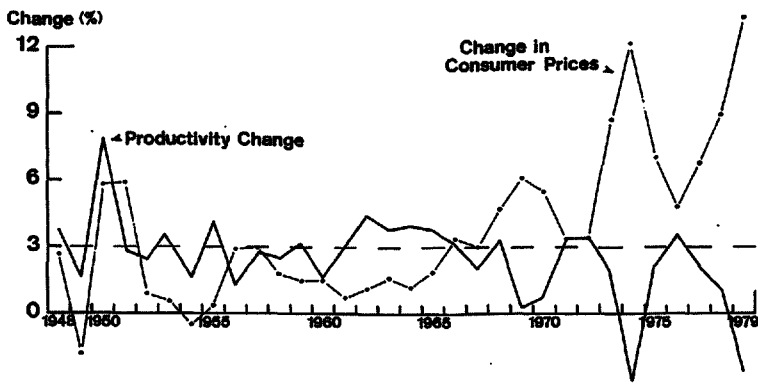
In addition, the indexing principle has spread in the past decade from heavy industry, where productivity gains can partly offset escalated wage increases, to many other sectors where productivity gains are modest or completely lacking. Moreover, it applies to people no longer in the labor force. In fact, active workers now account for only about one-eighth of all the individuals benefitting from cost-of-living adjustments, what with the ex-

tensions of coverage to federal retirees, social-security beneficiaries and food-stamp recipients — and in a limited way to some private-industry retirees. On the other hand, beneficiaries generally haven't recouped all their inflation losses, because of the various restrictions included in most adjustment formulas. In the first half of 1979, escalators offset only 52 percent of the rise in consumer prices.

Considering the fact that escalators tend to maintain the past mechanism of inflation, the question arises whether we have actually developed the best possible measure for applying the formula. Many critics would say we haven't. They criticize the measure chosen — the consumer-price index (CPI) — for overstating the rate of price increases, and thus intensifying rather than simply offsetting the inflation problem. Indeed, the CPI rose 11.0 percent between the second quarter of 1978 and the second quarter of 1979, compared with an 8.5-percent rise for an alternative measure, the deflator for consumer purchases in the GNP accounts. Several downward biases also exist in the index, but at present the upward biases seem to predominate, despite the best efforts of the Bureau of Labor Statistics (BLS) to improve the methodology. As economist Alan Greenspan recently said, "The index is the best thing going but it is not the best thing possible."

Under-estimating inflation

The CPI is biased upward partly because the Bureau of Labor Statistics computes the index on the basis of fixed weights, with undue prominence given to items which have increased rapidly in price. Even the revised index introduced last year is based on a consumer-expenditure survey conducted in 1972-73, before food and energy prices increased so dramatically. The index thus fails to take account of the substitution effect that leads consumers to switch from higher-priced goods and services to lower-priced (or more available) substitutes. For example, BLS has recorded a sharp increase in the cost of movie-going over the past several decades,



but has tended to ignore the fact that many families watch movies for free on their home TV sets. Again, the index fails to pick up the recent shift from auto to air travel for long-distance trips, as a reflection of gas shortages and deregulated airline fares. In contrast, the price index (deflator) for consumer expenditures picks up such shifts, which may partly account for its smaller increase in relation to the fixed-weighted CPI.

The CPI is also biased upward because of the way that BLS treats home-purchase costs, plus financing and taxes. These costs, which have increased about 16 percent over the past year, account for one-fifth of the weight of the entire index. BLS figures the full price of home purchase into the index in the period in which it occurs, just like immediately consumable items, although the cost of a house in reality is generally amortized over a 20-to-30-year period.

The housing index ideally should measure the cost of housing services. But including the full increase in housing prices ignores the fact that part of the increase represents anticipated capital gains which are not themselves part of the cost of housing. The index also includes real estate taxes, which have risen largely in response to soaring property values, but it does not include the benefits to households of those sharp increases in property values. (The inflation-based boost in the value of the nation's housing stock may be in the neighborhood of one trillion dollars.) In any event, the relatively small number of households making home-purchase decisions each year are thereby, through the escalator mechanism, helping to boost the payments received by millions of other individuals, workers and retirees alike.

Finally, the CPI does not seem to measure adequately the many improvements that have occurred in the quality of consumer products, and thus imparts a further upward bias to the COLA mechanism. For example, BLS introduced a major new consumer product, pocket calculators, into the index last

year, but this development occurred after the price of that product had already dropped roughly 90 percent below its initial value. Yale Professor Richard Ruggles argues that unmeasured quality improvements in the past have offset as much as two percentage points of the annual increase in consumer prices.

Aggravating inflation

Altogether, despite the many virtues of the GM-UAW agreement of 1948, it must be faulted for aggravating the inflation problem of a later generation. First, the negotiators believed that there would always be a larger pie to split up among the parties concerned, ignoring the fact that periods of rising productivity cannot always be guaranteed. Again, the negotiating parties ignored the fact that the escalator mechanism chosen for making cost-of-living adjustments — the consumer price index — wasn't necessarily the most precise measure of inflationary pressures. Still, the two leading negotiators, "Engine Charley" Wilson for GM and Walter Reuther for the UAW, probably only thought they were settling a single industry's problems, and simply failed to realize that they were affecting the state of the economy for decades to come.

William Burke

FIRST CLASS

Alaska • Nevada • Oregon • Utah • Washington
 Idaho • California • Hawaii

San Francisco

Bank of

Federal Reserve

Research Department

FIRST CLASS MAIL
 U.S. POSTAGE
 PAID
 PERMIT NO. 752
 San Francisco, Calif.

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding 9/5/79	Change from 8/29/79	Change from year ago @	
			Dollar	Percent
Large Commercial Banks				
Loans (gross, adjusted) and investments*	132,363	776	17,959	15.70
Loans (gross, adjusted) — total#	109,211	603	17,223	18.72
Commercial and industrial	31,703	182	4,565	16.82
Real estate	40,026	157	8,208	25.80
Loans to individuals	22,489	64	NA	NA
Securities loans	1,984	— 102	NA	NA
U.S. Treasury securities*	7,650	169	— 1,015	— 11.71
Other securities*	15,502	4	1,751	12.73
Demand deposits — total#	46,377	4,432	2,919	6.72
Demand deposits — adjusted	31,192	301	1,562	5.27
Savings deposits — total	30,508	107	6	0.02
Time deposits — total#	52,753	112	6,228	13.39
Individuals, part. & corp.	44,420	187	7,690	20.94
(Large negotiable CD's)	19,261	98	1,061	5.83
Weekly Averages of Daily Figures	Week ended 9/5/79	Week ended 8/29/79	Comparable year-ago period	
Member Bank Reserve Position				
Excess Reserves (+)/Deficiency (—)	26	33		24
Borrowings	142	147		51
Net free reserves (+)/Net borrowed(—)	— 116	— 114	—	27
Federal Funds — Seven Large Banks				
Net interbank transactions	— 61	— 545	+	818
[Purchases (+)/Sales (—)]				
Net, U.S. Securities dealer transactions	— 292	— 285	—	12
[Loans (+)/Borrowings (—)]				

* Excludes trading account securities.

Includes items not shown separately.

@ Historical data are not strictly comparable due to changes in the reporting panel; however, adjustments have been applied to 1978 data to remove as much as possible the effects of the changes in coverage. In addition, for some items, historical data are not available due to definitional changes.

Editorial comments may be addressed to the editor (William Burke) or to the author . . . Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.