FEDERAL RESERVE BANK OF NEW YORK

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Contents

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The Business Situation

While many business indicators have lately been distorted by the rocketing rate of inflation, it appears that a modest recovery in economic activity is under way. Industrial production advanced in May for the second consecutive month, following the sharp energy-related declines in the four preceding months. At the same time, new orders for durable manufactured goods rose, and the backlog of unfilled durables orders climbed further. An expansion in capital spending appears to be in prospect for coming months, especially in the manufacturing sector. On the other hand, consumer spending has remained noticeably weak. Constant-dollar retail sales have been essentially flat throughout the year, well below the peak level attained early in 1973. Residential construction has been plagued by higher interest rates, increasing costs and prices, declining new home sales, and a general unavailability of mortgage financing. Although the unemployment rate rose in May, it was largely the result of a large jump in the teen-age labor force following two months of unusual declines. In June, labor market conditions were essentially unchanged and the unemployment rate held steady at 5.2 percent of the civilian labor force.

Inflation remains severe in most sectors of the economy. At an annual rate, consumer nonfood prices spurted 15 percent in May, up slightly more than 3 percentage points from the rate of increase experienced in earlier months of the year. Also in May, a sharp acceleration occurred in the rate of advance of wholesale industrial prices, excluding power and fuel. In contrast, wholesale agricultural prices dropped for the third consecutive month. To the extent that some of these increases reflect the termination of price controls, the pace of inflation should moderate in coming months. However, the degree of moderation is likely to be limited as a result of the concurrent buildup of cost pressures on prices. While there are indications that at least some raw materials prices are receding from recent peaks, it is too early to conclude what effect this might have on finished product prices. Furthermore, the failure of declines in food prices at the wholesale level to affect retail food prices significantly is a matter of concern.

INDUSTRIAL PRODUCTION, ORDERS, AND INVENTORIES

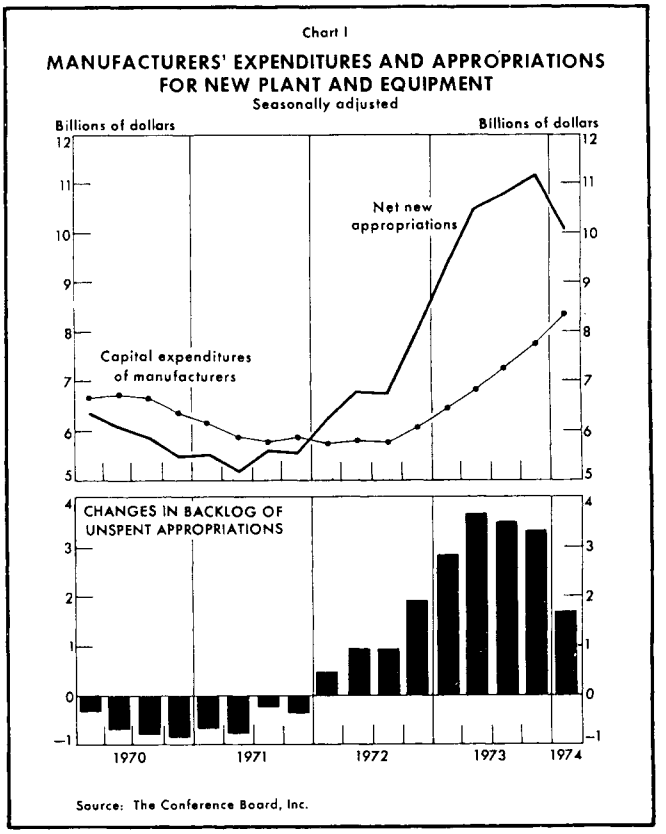
On a seasonally adjusted basis, the Federal Reserve Board's index of industrial production rose in May at a 4.8 percent annual rate, its second consecutive monthly advance. Nevertheless, the index in May remained 1.6 percent below last November's peak. The overall May advance was concentrated in the output of consumer goods and business equipment. Total energy production increased in May, and gasoline output surpassed its pre-embargo level. The production of basic materials was unchanged. However, there appears to have been some easing lately in the very tight supply conditions that had prevailed in many basic raw materials industries through much of last year. The Federal Reserve Board's index of capacity utilization in major materials industries has declined for two successive quarters following the record high level reached in the third quarter of 1973. Moreover, according to the National Association of Purchasing Management's survey, the percentage of respondents reporting forward commitments of sixty days or longer to buy production materials has declined noticeably since February. Despite the easing, some materials are still in short supply.

The automotive sector has displayed signs of a modest further recovery in recent months. In May, new car assemblies rose to a seasonally adjusted annual rate of 7.7 million units, the highest thus far this year but nearly 25 percent below the pace of a year ago. Sales of new domestic models increased slightly in June to an annual rate of 8 million units, up about 5 percent from the rate of sales averaged in the first quarter of the year. Increased sales of full-size models accounted for virtually all of the

improved performance of the past several months, as the market share of small models declined to about one third of total sales.

Led by the large advance in new bookings for primary metals, the seasonally adjusted flow of new orders placed with durable goods manufacturers surged 5.9 percent in May. Coupled with the large increase of the preceding month, the May rise advanced new durables orders above the high level that had prevailed late last year. The April and May gains, moreover, exceeded the price hikes recorded for manufactured durable goods in those months. Shipments of durables also rose in May, but they remained below new orders, and the backlog of unfilled orders mounted further. While in recent months the accelerating rate of inflation has boosted the growth rate in the backlog of unfilled orders, an uptrend is still in evidence when unfilled orders are measured in constant-dollar terms.

The book value of manufacturing inventories rose significantly in May, advancing at a seasonally adjusted annual rate of close to $28 billion. This represents a substantial increase over the gain of the previous month and is somewhat more than the $25.6 billion increase averaged in the December-to-February period. However, since manufacturers' shipments have kept pace, the inventory-sales ratio in this sector has remained virtually unchanged at 1.62 for four consecutive months. As a consequence of inflation, the inventory figures are somewhat difficult to interpret. It does not appear, however, that a substantial amount of undesired inventory accumulation has been camouflaged because of price movements. Less than 15 percent of the May rise in manufacturing inventories was attributable to increased stocks of finished goods. The remainder was the result of increases in stocks of purchased materials and work in progress. Apart from the buildup of purchased materials and work in progress in capital goods industries, which reflect the continued expansion in new bookings, the buildup of nonfinished goods inventories over the last several months may be a consequence of the shortages which depleted buffer materials stocks during 1973. In the aftermath, firms were induced to accumulate material inventories.



CAPITAL SPENDING

According to the survey taken by the Commerce Department in April and May, total business outlays for new plant and equipment are now expected to rise 12.2 percent in nominal terms in 1974, only slightly below the 13 percent gain foreseen in the Commerce Department's survey taken three months earlier. The downward revision was in expenditure plans for the second half of the year and was centered in nonmanufacturing industries, particularly electric and gas utilities, mining, and communications. In contrast, for manufacturing industries, the planned 19.8 percent increase for 1974 outlays on new plant and equipment is slightly higher than the figure reported three months earlier. Moreover, within the manufacturing sector, major material-producing industries reported relatively large increases in intended outlays, much of which will go toward expanding current capacity.

In a separate survey conducted earlier by the Conference Board, net new appropriations for capital goods by the nation's 1,000 largest manufacturing firms declined almost 10 percent in the first quarter on a seasonally adjusted basis (see Chart I). Most of this decrease was attributed to an extraordinarily large increase in project cancellations by the automotive industry, which was then enshrouded by the uncertainties of the energy shortage; it was anticipated that many of these canceled projects would be reinstated in subsequent quarters. In any event, the backlog of unspent appropriations swelled further, rising by 4.6 percent over the quarter. At a record $38.3

billion in the first quarter, unspent appropriations were almost 50 percent higher than a year earlier. Judging by past experience, most of these unspent funds will be translated into actual expenditures, and this augurs for a sizable increase in capital expenditures by manufacturers over the near term.

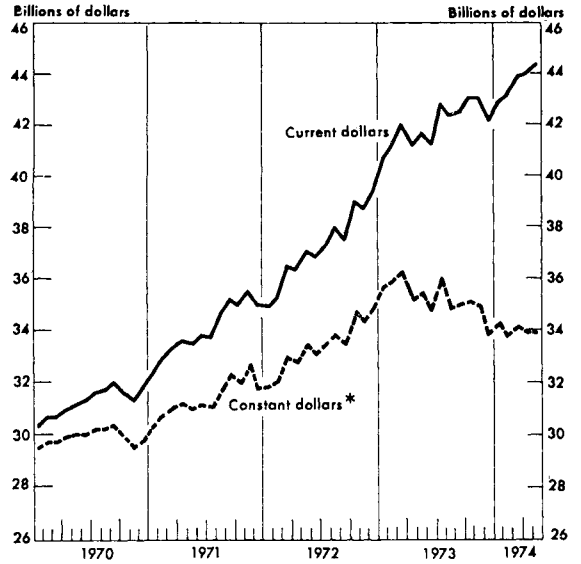
PERSONAL INCOME AND CONSUMER DEMAND

While the expansion in personal income picked up over the April-May period, constant-dollar retail sales remained weak. Personal income advanced at a $10.6 billion seasonally adjusted annual rate in May, the biggest rise since last November. Farm income fell for the fifth consecutive month as agricultural prices continued to decline. This was more than offset by the large $7.8 billion gain in wage and salary disbursements in the private sector, of which about $2 billion stemmed from the expanded coverage and higher minimum wage rate of the newly instituted minimum wage law. Increases in manufacturing employment and an acceleration in average hourly earnings boosted wage and salary disbursements in manufacturing by $3.1 billion, the largest hike in over two years.

In May, seasonally adjusted retail sales rose $425 million, an 11.6 percent annual rate gain. Sales of both automotive and other durable goods were up noticeably in current-dollar terms, while nondurables sales inched ahead. Over the first five months of the year, retail sales of nonautomotive durable goods climbed at almost a 20 percent annual rate, while gains in the automotive and nondurables categories were more moderate. Although automotive retail sales, which include purchases of both new and used cars, have rebounded from the February low, in May they were still 7 percent below last year's average monthly sales.

When the retail sales figures are adjusted for recent price hikes, consumer spending appears to have been decidedly weak of late (see Chart II). Indeed, measured in terms of the consumer commodity prices that prevailed in 1969, constant-dollar retail sales not only declined in May but were lower than at the start of the year. This decline, moreover, has been widely based, encompassing automotive, other durables, and nondurables purchases. Over the past year and a half, there has also occurred a relatively large drop in real income, although the extent of the decrease is difficult to measure. In any event, it seems clear that the erosion in real income has had a deleterious impact on the rate of real consumer spending.

Chart II
RETAIL SALES
Seasonally adjusted



*Current-dollar retail sales deflated by the index for consumer commodity prices: 1969=100.
Source: United States Department of Commerce, Bureau of the Census.

RESIDENTIAL CONSTRUCTION

Reflecting very tight mortgage market conditions, the residential housing situation continued to deteriorate in May. Private housing starts dropped precipitously, falling 11 percent to a seasonally adjusted annual rate of 1.45 million units. New building permits also fell almost 19 percent to 1.06 million units, the lowest total since April 1967. Continuing the pattern which emerged late last year, the May decline in housing starts was largely attributable to the steep drop in new construction of multifamily units. In recent years, real estate investment trusts have emerged as important lenders for multifamily unit construction. No doubt the difficulties they have had of late in issuing stock and tapping other sources of funds has contributed to the scarcity of financing for multifamily units.

The run-up in interest rates during the last several months has severely restricted the availability of mortgage money. Seasonally adjusted deposit growth of thrift institutions slowed to 1 percent at an annual rate in May, in contrast to the 7.3 percent growth rate during the first four months of the year. At the Federal National Mortgage Association's auction on July 2, the secondary market interest rates on four-month forward commitments for insured and conventional mortgages were in excess of 9.6 percent. The Federal Home Loan Bank Board's effective interest

rate on new home conventional mortgages climbed to a new record in May. For potential home buyers, the cost of mortgage financing has risen further. Reportedly, commitments on conventional mortgages are now being negotiated at contract rates slightly in excess of 9 percent.

LABOR MARKET

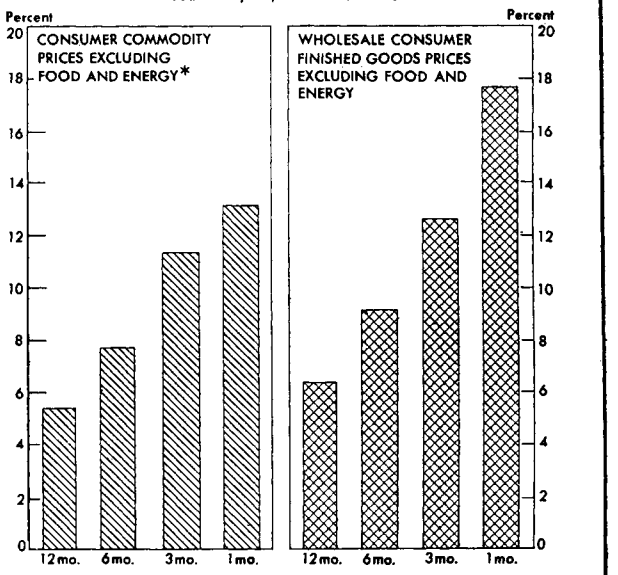
According to the household survey, the civilian labor force grew by 366,000 persons in May. This was more than enough to offset the largest gain in total civilian employment of the past six months. Consequently, the overall unemployment rate went up 0.2 percentage point in May to 5.2 percent on a seasonally adjusted basis. The May increase in the number of jobless workers looking for employment was more than accounted for by the additional 199,000 teen-agers who were unemployed. Labor market conditions were little changed in June, as the unemployment rate held steady and the age-sex composition of unemployment remained essentially unaltered. Total civilian employment increased by 194,000 workers in June, matching the May gain.

Some peculiarities in the household survey seem to have reversed themselves in the May data. It had been expected that an economic slowdown would result in higher joblessness particularly among secondary workers, most of whom are women and teen-agers. These expectations were not borne out by the data for earlier months. However, in May, both the teen-age and adult female unemployment rates rose from their low April levels, while the adult male unemployment rate fell to 3.4 percent. In addition, the adult male civilian labor force increased by a substantial 162,000 workers, reversing the declines that had occurred in the two previous months.

Seasonally adjusted payroll employment rose by a healthy 214,000 in May but subsequently declined by about 50,000 workers in June. The May rise was largely the result of big gains in government and services employment. To some extent, increased strike activity in contract construction may have contributed to the June decline in payroll employment. While the results of the household and payroll surveys diverged considerably in June, this frequently occurs because of differences in coverage, sampling techniques, and seasonal patterns. The surveys tend to show comparable changes over somewhat longer periods of time.

Taking a somewhat broader perspective, it is noteworthy that neither the unemployment rate nor the growth rate of employment since last November has been as severely affected by the recent economic slowdown as during the first six months of the 1960-61 and 1969-70 recessions. Much of the first-quarter decline in real output was centered in the automotive sector, where labor productivity is relatively high. Consequently, with so many automotive workers laid off in the early months of the year, a small increase in unemployment was accompanied by a large decline in real output. Moreover, to the extent that the slowdown was the result of materials shortages rather than slack demand, employers were probably more reluctant to lay off workers than they would otherwise have been.

Chart III
CHANGES IN CONSUMER AND WHOLESALE PRICES
Seasonally adjusted annual rates



*Constructed from data released by the Bureau of Labor Statistics.
Source: United States Department of Labor, Bureau of Labor Statistics.

The latest wage data point toward an acceleration in the rate of growth of hourly earnings. On a seasonally adjusted basis, average hourly earnings of production and nonsupervisory workers in the private nonfarm economy, adjusted for overtime hours in manufacturing and for shifts in the composition of employment among industries, increased in June at a 12.3 percent annual rate. This was equal to the May advance but was well above the rate of increase in earnings experienced over the preceding six months. Especially large increases in hourly earnings were recorded in June for workers in the manufacturing, finance, and construction sectors. In part, these hikes doubtless reflected the termination of wage controls. In the months ahead, the increases in contract settlements and in hourly

wage rates are likely to remain substantial, as workers attempt to keep pace with the rate of inflation as well as to make up for previous declines in real earnings over the past year or so.

PRICES

Inflation remains severe in most sectors of the economy, though lately there has been some retrenchment in food prices at the wholesale level. In line with previous expectations, the rates of increase in consumer and wholesale nonfood prices both accelerated in May, reflecting in part the price hikes that many firms instituted when the price controls program was terminated on May 1.

Consumer prices, seasonally adjusted, resumed their explosive advance in May, surging ahead at a 12.7 percent annual rate. A disturbing feature of the May increase was its pervasiveness. Consumer food prices posted a fairly large rise, more than erasing the previous month's drop. Consumer nonfood commodity prices jumped 15.3 percent in May, almost double the rate of advance of the previous twelve months. The recent acceleration in these prices is undoubtedly the result of the concurrent run-up in wholesale consumer finished goods prices (see Chart III).

At the wholesale level, prices rose at a 15.5 percent seasonally adjusted annual rate in May. Higher industrial wholesale prices wholly accounted for the overall advance, as the prices of farm products and of processed foods and feed posted another sharp decline. Wholesale power and fuel prices decelerated further in May, though their rate of increase still topped 30 percent. Excluding power and fuel prices, industrial prices surged at a 32.5 percent annual rate in May, up from the 25 percent rate recorded during the previous three months. The May spurt reflected both the response of firms to the removal of the price controls and the pass-through of current and previous increases in energy and materials prices. In May, prices of nonfood raw materials declined sharply, the first decrease in two years, but prices of intermediate nonfood materials and supplies jumped considerably.

The Money and Bond Markets in June

Most interest rates resumed their upward course in June shortly after the beginning of the month as an initially optimistic mood was dispelled. Although some market observers hoped that interest rates had peaked, others felt that inflationary expectations had yet to be fully incorporated in current interest rates and that pressures on the credit markets would continue. Inflationary forces were confirmed by the incoming price statistics, and upward movement in the Federal funds rate along with reports of heavy bank borrowing by businesses seemed to support the latter view. Consequently, yields resumed their climb. Several short-term rates set new records, among them the prevailing prime rate, which reached 11¾ percent by the month end.

The corporate and municipal bond markets sagged as a number of medium-grade new issues sold slowly. Investors continued to reevaluate the implications for the utility industry of higher energy prices and inflation. Generously priced intermediate-term issues sold well, but investors were wary of longer term offerings. Near the end of the month, a record yield was set on a telephone issue, although most yields remained a touch below the highs reached in 1970.

In contrast, Treasury obligations proved to be in demand, and rates on short-term bills experienced net declines during the month. Among the factors buoying demand were large purchases by foreign central banks, the absence of default risk attached to Treasury issues, and reports that the oil-exporting nations might be investing some of their funds in Treasury securities. Technical factors also supported the market since the increased demand came at a time when dealers' inventories were unusually low.

Growth in the monetary aggregates speeded up again in June after slowing in May. Both M_1—private demand deposits adjusted plus currency outside commercial banks—and M_2—which also includes time deposits other than large negotiable certificates of deposit (CDs)—grew more rapidly in the four weeks ended June 26 than they had in May. The growth of large CDs, while still rapid, slowed from the explosive pace of the previous two months.

THE MONEY MARKET, BANK RESERVES, AND THE MONETARY AGGREGATES

Rates on most money market instruments held steady in the early part of June but soon resumed their upward course (see Chart I). The effective rate on Federal funds advanced to a new record and averaged 11.93 percent for the month, up 62 basis points from the previous record level set in May. Dealers raised their offering rates on prime commercial paper by a net 1¼ to 1½ percentage points over the month, establishing a rate of 12 percent on 30- to 119-day paper and 11⅞ percent on longer term paper. Secondary market rates on large negotiable CDs dropped early in the month but climbed sharply thereafter to around 12⅛ percent for three-month maturities, a 110 basis point gain for the month.

Business demand for loans, which had shown signs of slackening in May, burgeoned again in the second week of June and was also strong over the June 15 tax date. Consequently, the move by a handful of banks in the first week to reduce the prime rate from 11½ percent to 11¼ percent was not followed by other banks. By the third week, most of those banks had returned to an 11½ percent prime rate. On June 24 a few banks lifted the prime rate to 11¾ percent, and by the end of the month most other banks had followed suit.

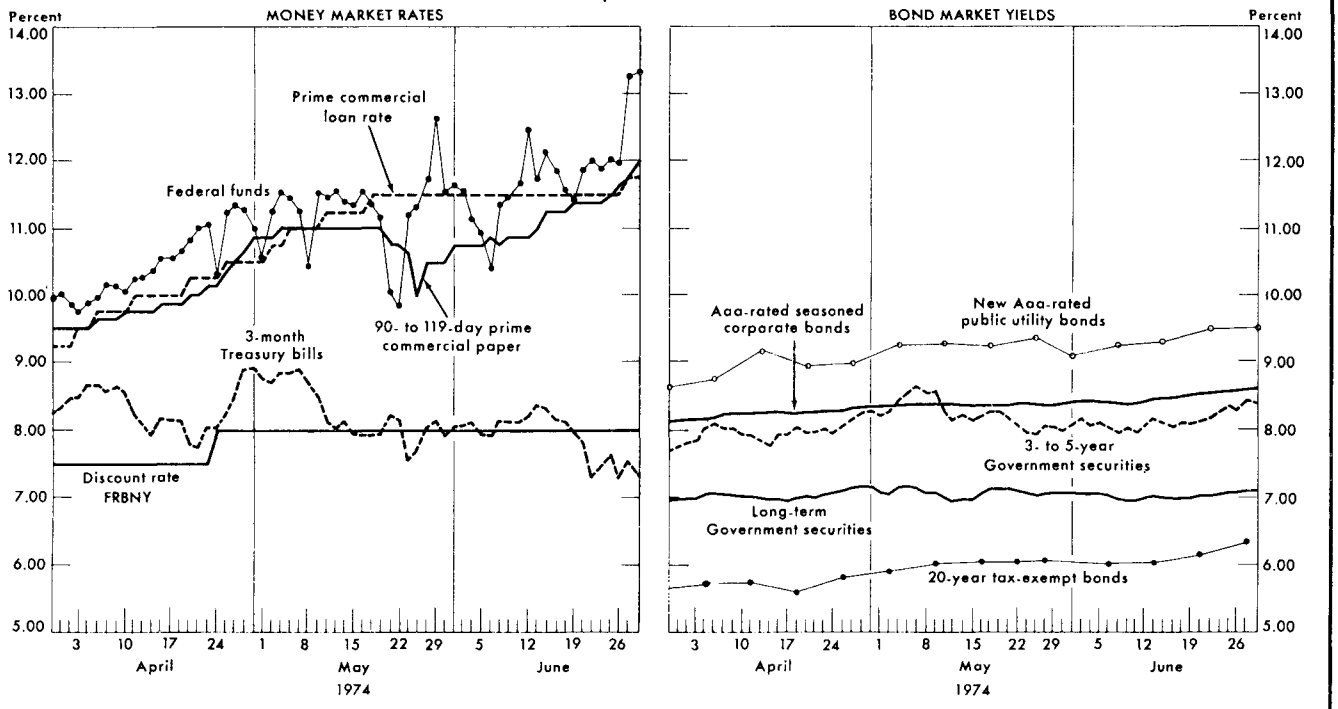
In the face of strong credit demands and money market pressures, member banks were again heavy borrowers from the Federal Reserve. Average borrowings for the month were $2,949 million (see Table I), the highest monthly average ever. Part of this again reflected substantial lending to Franklin National Bank, although the bank was able to reduce somewhat its borrowing from the System after it arranged to buy up to $250 million of Federal funds on a secured basis from Clearing House banks in New York and certain other banks.

According to preliminary data, the monetary aggregates advanced at a rapid pace in June after having grown moderately in May. For the four weeks ended June 26, M_1 grew at an 8.4 percent seasonally adjusted annual rate relative to its average of the last four weeks in May. In

Chart I

SELECTED INTEREST RATES

April - June 1974



Note: Data are shown for business days only.

MONEY MARKET RATES QUOTED: Prime commercial loan rate at most major banks; offering rates (quoted in terms of rate of discount) on 90- to 119-day prime commercial paper quoted by three of the five dealers that report their rates, or the midpoint of the range quoted if no consensus is available; the effective rate on Federal funds (the rate most representative of the transactions executed); closing bid rates (quoted in terms of rate of discount) on newest outstanding three-month Treasury bills.

BOND MARKET YIELDS QUOTED: Yields on new Aaa-rated public utility bonds are based on prices asked by underwriting syndicates, adjusted to make them equivalent to a standard Aaa-rated bond of at least twenty years' maturity; daily averages of yields on seasoned Aaa-rated corporate bonds; daily averages of yields on long-term Government securities (bonds due or callable in ten years or more) and on Government securities due in three to five years, computed on the basis of closing bid prices; Thursday averages of yields on twenty seasoned twenty-year tax-exempt bonds (carrying Moody's ratings of Aaa, Aa, A, and Baa).

Sources: Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, Moody's Investors Service, Inc., and The Bond Buyer.

comparison to the four-week average of a year earlier, M_1 grew 5.8 percent in the four weeks ended June 26 (see Chart II). The acceleration in the growth of M_2, to an estimated 10.5 percent rate for the four weeks ended June 26 relative to the average of the four previous weeks, reflected a bulge in the time deposit component at the beginning of June following some sluggishness in May. Average time deposit growth over the eight-week period ended in late June was close to the pace of expansion of the preceding two months. Large negotiable CDs grew at an estimated 28.8 percent rate in the four weeks ended June 26, compared with the explosive 120 percent seasonally adjusted annual rate in the previous two months. Consequently, growth of the adjusted bank credit proxy moderated somewhat in June, but its growth rate from thirteen weeks earlier was an unusually strong 20.9 percent.

THE GOVERNMENT SECURITIES MARKET

Prices of Treasury securities moved irregularly during June, with the strongest performances being shown by the shorter maturity issues. At times the inflationary worries that were contributing to upward movements in other interest rates also put pressure on Treasury securities. For the most part, however, the Treasury sector was shielded from these forces, as investors showed a strong preference for Treasury obligations—particularly bills—over other market instruments.

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, JUNE 1974

In millions of dollars; (+) denotes increase and (—) decrease in excess reserves

Factors	Changes in daily averages—week ended				Net changes
	June 5	June 12	June 19	June 26	
"Market" factors					
Member bank required reserves	+ 100	+ 396	— 793	+ 38	— 259
Operating transactions (subtotal)	+ 467	+1,716	—1,463	— 650	+ 70
Federal Reserve float	+ 406	— 160	+ 133	— 110	+ 269
Treasury operations*	+ 394	+1,895	— 571	—1,143	+ 575
Gold and foreign account	— 112	+ 90	— 683	+ 649	— 56
Currency outside banks	— 235	— 363	— 242	+ 91	— 749
Other Federal Reserve liabilities and capital	+ 14	+ 254	— 99	— 137	+ 32
Total "market" factors	+ 567	+2,112	—2,256	— 612	— 189
Direct Federal Reserve credit transactions					
Open market operations (subtotal)	— 24	—1,890	+1,828	+ 825	+ 739
Outright holdings:					
Treasury securities	— 279	—1,283	+1,510	— 234	— 286
Bankers' acceptances	— 1	— 1	— 2	+ 1	— 3
Federal agency obligations	— 11	— 31	— 41	—	— 83
Repurchase agreements:					
Treasury securities	+ 66	— 277	+ 261	+ 617	+ 667
Bankers' acceptances	+ 64	— 81	+ 80	+ 26	+ 89
Federal agency obligations	+ 137	— 217	+ 20	+ 415	+ 355
Member bank borrowings	— 549	— 325	+ 494	— 435	— 815
Seasonal borrowings†	+ 17	+ 5	+ 6	— 9	+ 19
Other Federal Reserve assets‡	+ 112	+ 23	+ 59	+ 67	+ 261
Total	— 461	—2,193	+2,381	+ 458	+ 185
Excess reserves‡	+ 106	— 81	+ 125	— 154	— 4

	Daily average levels				Monthly averages§
Member bank					
Total reserves, including vault cash‡	36,280	35,083	36,721	36,529	36,153
Required reserves	36,066	35,670	36,463	36,425	36,156
Excess reserves	214	133	258	104	177
Total borrowings	3,054	2,729	3,223	2,788	2,949
Seasonal borrowings†	131	136	142	133	136
Nonborrowed reserves	33,226	32,354	33,498	33,741	33,205
Net carry-over, excess or deficit (—)‖	95	101	63	78	85

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† Included in total member bank borrowings.
‡ Includes assets denominated in foreign currencies.
§ Average for four weeks ended June 26, 1974.
‖ Not reflected in data above.

In the Treasury bill market, rates moved irregularly higher in the first two weeks of June, and then shorter rates plunged in the third week. Rates on most issues due within six months fell 22 to 62 basis points that week, with the three-month bill rate falling by more than 100 basis points to 7.30 percent. In the final week of the month, many participants became concerned that the declines had been exaggerated, but rate increases attracted buyers and were quickly reversed. By the end of June, rates on longer term bills were 2 basis points below to 22 basis points above their month-earlier levels, while rates on bills maturing within six months were 6 to 77 basis points lower. In the last half of June, the three-month bill rate averaged more than 4 percentage points below rates available on CDs or commercial paper of the same maturity. This is considerably greater than the normal spread between these instruments, which averaged less than 1½ percentage points in 1973.

A substantial portion of the demand for bills came from foreign central banks. Marketable debt held by the Federal Reserve in custody for official foreigners increased by a net $1,206 million between May 29 and June 26. Some of this demand came from one country, which was restructuring its Treasury debt holdings to achieve a better balance. To this end, it began bidding for $200 million of new Treasury bills each week for ten weeks, beginning with the June 17 auction, to replace special nonmarketable issues. To accommodate this restructuring, the Treasury continued to offer approximately $4.5 billion of bills in that and succeeding auctions to replace $4.3 billion of maturing bills. Other factors which contributed to the strength in demand for bills were the reinvestment of the proceeds from the maturing June tax anticipation bills, less than 20 percent of which was used to pay taxes, and the continued large orders from individuals who found the yields more attractive than those on alternative investments available in denominations of less than $10,000.

In the regular weekly auction held June 3, bidding interest was routine and average issuing rates of 8.300 and 8.426 percent, respectively, were established on the three- and six-month bills (see Table II). In the next two auctions, rates were pushed lower and dealers bid aggressively as they sought to replenish their depleted inventories in the face of continued evidence of investor demand. By June 24, participants had become concerned that rates had been pushed too low in the previous few days and cautious bidding led to rates that were above pre-weekend levels but still below those of a week earlier. In the monthly auction of 52-week bills held June 26, bidding interest was restrained and the average issuing rate of 8.256 percent

was somewhat above rates on outstanding issues.

The market for Treasury coupon issues initially benefited from the optimistic view expressed by several market observers that interest rates might be near their peaks. Successful sales of corporate and Federal agency bonds were interpreted as an encouraging sign. By midmonth, however, participants became more cautious in the face of renewed strength in credit demand and a large increase in the wholesale price index in May. Subsequent price declines erased earlier gains. Yields on most intermediate-maturity issues were 7 basis points lower to 38 basis points higher, on balance, for the month. Yields on longer term issues moved narrowly and were 2 basis points lower to 9 basis points higher.

Prices of Federal agency issues also moved in a relatively narrow range. On June 6, the Federal Home Loan Banks sold $1.5 billion of bonds to raise new cash. The offering consisted of $400 million of 8.70 percent bonds due February 25, 1976, $500 million of 8.70 percent bonds due May 25, 1977, and $600 million of 8.65 percent bonds due February 26, 1979. The issues were well received. The six-month bonds offered June 19 by the Banks for Cooperatives sold slowly despite a 9¼ percent yield, considerably above Treasury issues of similar maturity. A better reception was accorded the Federal Intermediate Credit Banks' nine-month 9¼ percent bonds and 33-month 8.70 percent bonds which were marketed at the same time.

Table II

AVERAGE ISSUING RATES AT REGULAR TREASURY BILL AUCTIONS*

In percent

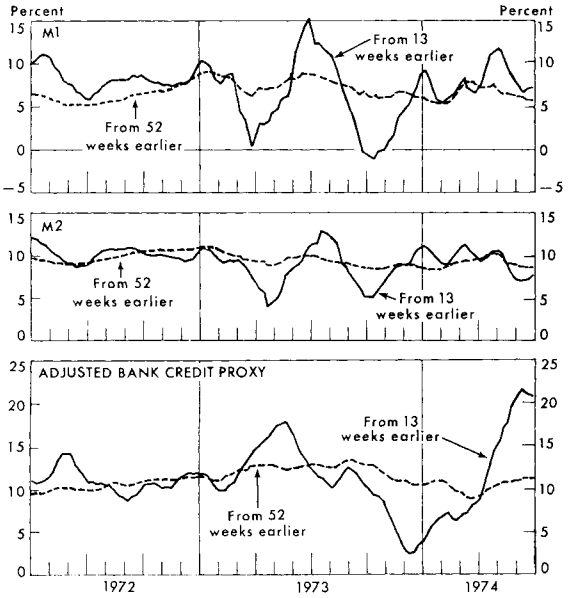
Maturity	Weekly auction dates—June 1974			
	June 3	June 10	June 17	June 24
Three-month	8.300	8.260	8.177	7.841
Six-month	8.426	8.324	8.175	8.003
	Monthly auction dates—May-June 1974			
	May 2	May 29	June 26	
Fifty-two weeks	8.421	8.248	8.256	

* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.

Chart II

CHANGES IN MONETARY AND CREDIT AGGREGATES

Seasonally adjusted annual rates



Note: Growth rates are computed on the basis of four-week averages of daily figures for periods ended in the statement week plotted, 13 weeks earlier and 52 weeks earlier. The latest statement week plotted is June 26, 1974.

M1 = Currency plus adjusted demand deposits held by the public.

M2 = M1 plus commercial bank savings and time deposits held by the public, less negotiable certificates of deposit issued in denominations of $100,000 or more.

Adjusted bank credit proxy = Total member bank deposits subject to reserve requirements plus nondeposit sources of funds, such as Euro-dollar borrowings and the proceeds of commercial paper issued by bank holding companies or other affiliates.

Source: Board of Governors of the Federal Reserve System.

THE OTHER SECURITIES MARKETS

Yields climbed sharply in the corporate and municipal bond markets during the month, with a record rate being set on one new issue, while other rates reached levels that had not prevailed since 1970. The persistence of rapid inflation and indications of heavy business demand for bank loans contributed to the general upward push in long-term rates. Faced with increased uncertainty with respect to future inflation, investors were reluctant to commit long-term funds at fixed rates. Consequently, a number of 25- to 35-year offerings attracted little investor interest, while shorter term issues generally sold well.

With both the current and future calendar of new issues expected to be heavy, underwriters were reluctant to build inventories and bid cautiously, setting large spreads between the net interest cost and the reoffering rates. On several occasions, terms were proposed that were deemed

unacceptable by the borrowers, resulting in the cancellation or postponement of a number of issues.

To overcome the resistance to long-term commitments, a major bank holding company announced its plan to offer a fifteen-year note in July, with the interest rate subject to adjustment as the Treasury bill rate changes. Holders of the notes will have the opportunity, on thirty days' notice, to redeem the securities at 100 percent of their face value on any interest payment date.

When the month began, the market for corporate bonds was firm, amid predictions that credit demands would be easing and short-term interest rates would therefore turn down. Negotiated industrial and financial offerings sold well in the first week of June, and a five-year Aaa-rated utility bond was enthusiastically received when priced to yield 8.75 percent. In the following week, however, inflation and credit worries again increased and most short-term interest rates either held steady or began edging back up. Rates rose sharply on several long-term issues which were released from syndicate price restrictions—as much as 51 basis points in one case. Subsequently, the higher yields attracted some investor interest, but the latter was largely restricted to high-quality offerings with relatively short maturities.

Concern about the financial soundness of utility bonds, which had emerged when a major electric utility company reported financial difficulties, led to a preference for top-quality issues. Consequently there was a 165 basis point spread between two long-term utility bonds offered in the second week of June. A $90 million offering of Aaa-rated 34-year telephone debentures was priced to yield 8.75 percent. Two days later, an electric utility issued $50 million of 30-year mortgage bonds, which were rated A by Moody's and BBB by Standard and Poor's. The 10.40 percent yield was the highest available since late 1970 on a long-term issue with this rating. In the deteriorating market atmosphere, sales of both issues were slow. Yields climbed higher in subsequent trading. At the end of the month, the telephone issue was trading at a price to yield 9.52 percent while the electric utility bonds were quoted at 11.48 percent.

In the final week, another Bell Telephone subsidiary, rated Aaa by Moody's but AA by Standard and Poor's, marketed $250 million of 37-year debentures. The issue offered a 9½ percent return, the highest ever on a Bell Telephone unit debt offering, topping the previous 9.35 percent rate set in June 1970. This issue sold well but was trading at a small discount from the original price by the month end.

Investor preference for intermediate-term offerings led to quick sales of three eight-year bond issues marketed in the third and fourth weeks of the month. The first, with a solid A rating, was priced to yield 10.10 percent, and the second, which carries a rating of Aa from Moody's and an A rating from Standard and Poor's, was priced to yield 10 percent. A 10 percent yield was also available on the final issue, sold June 27 with a straight Aa rating.

The tax-exempt sector also suffered from a heavy calendar and generally slack demand. Early in the period, several issues met with good receptions. For instance, the state of Ohio easily sold $50 million of Aaa-rated bonds June 4, with yields ranging from 5.20 percent in 1974 to 5.60 percent in 1990. As the month progressed, demand diminished despite generally higher yields. In the final week, a portion of an Aaa-rated offering by a number of local housing authorities had to be canceled because of the 6 percent legal ceiling on these obligations. However, the portion that was sold attracted good retail demand when priced to yield from 5.25 percent in 1975 to 6 percent in 2004-15. The Bond Buyer index rose 25 basis points to 6.33 percent between May 30 and June 27. Dealers met with limited success in reducing inventories in anticipation of further new issues. The Blue List of dealers' advertised inventories fell $37 million to $580 million.

The Contractual Cost-of-Living Escalator

By NICHOLAS S. PERNA

The linkages between living costs and wages have long intrigued workers, businessmen, economists, and policy makers. Both the direction and intensity of causation have been subject to considerable debate. The analysis that follows focuses on one aspect of the complex set of relationships between wages and prices, namely, the "cost-of-living escalator clause" included in a number of collective bargaining agreements. By combining readily available information with a number of realistic—and easily modifiable—assumptions, this article yields some estimates of the direct consequences of escalator clauses for such closely watched barometers of overall wage movements as private sector hourly compensation and aggregate major collective bargaining settlements.

The question addressed here is essentially the extent to which familiar, aggregate wage data are directly affected by escalator clauses included in collective bargaining agreements. Because of its relatively narrow focus, a number of related issues are not treated in this paper. For example, the analysis does not attempt to estimate "spillovers" that might result when wages of workers not covered by escalator adjustments are increased to keep pace with those of workers with automatic contractual escalators. More broadly, the present paper does not discuss whether the direct linking of wage rates to price indexes mitigates or exacerbates inflationary pressures. For the most part the statistics upon which this paper is based run through the end of 1973. There is evidence that the use of escalator clauses is becoming increasingly common. Thus, the available figures may understate somewhat the overall importance of escalator clauses and their impact on the broader measures of wage behavior.

Despite these various limitations, the paper provides some insights into the magnitude of the direct effects of escalator clauses on broad measures of wages. Perhaps the most important finding of this study is that, while automatic cost-of-living adjustments can have a substantial effect on the wages paid to workers with such clauses in their contracts, the direct implications for the aggregate measures of wage change have so far been comparatively modest. This conclusion stems primarily from the fact that only a minority of employees covered by labor agreements, and an even smaller proportion of workers in the overall economy, come under contractual escalator clauses.

The remainder of this paper is divided into four sections. In the first, the prevalence of cost-of-living escalator clauses in labor agreements throughout the economy is discussed, together with the impact of such clauses on total negotiated wage changes over the 1968-73 period. In the second section, the question of the impact of escalator clauses on compensation per man-hour, the broadest of the Bureau of Labor Statistics (BLS) wage indexes, is taken up. This analysis is followed in the third section with estimates of the effects of escalators on major collective bargaining settlements. Finally, the fourth section summarizes the major findings of this study.

BACKGROUND

As of the end of 1973, approximately 4 million workers from the total population of more than 10 million workers covered by major collective bargaining agreements, i.e., situations involving 1,000 or more workers, had escalator clauses in their contracts[1] (see Table I). Interestingly, while this is about double the number that had such clauses in the mid-1960's, it is almost precisely the same as during the 1958-60 period. The sharp fall in 1961 and the abrupt rise in 1972 in the number of workers covered largely represent the dropping and subsequent regaining of escalator clauses by more than 1 million workers in the steel and communications industries.

A smaller number, about 3 million workers, will actually receive increases from their escalator clauses in 1974 because cost-of-living adjustments are not scheduled for some contracts that expire during the year. This is in keep-

[1] See John L. Gurney, "Calendar of Wage Increases and Negotiations for 1974", *Monthly Labor Review* (January 1974), pages 3-8.

Table I

THE NUMBER OF WORKERS COVERED BY ESCALATOR CLAUSES IN THE BUREAU OF LABOR STATISTICS SERIES ON MAJOR COLLECTIVE BARGAINING AGRREEMENTS

January	Workers (millions)	January	Workers (millions)
1974*	4.0	1965	2.0
1973	4.1	1964	2.0
1972	4.3	1963	1.9
1971	3.0	1962	2.5
1970	2.8	1961	2.5-2.8
1969	2.7	1960	4.0
1968	2.5	1959	4.0
1967	2.2	1958	4.0
1966	2.0		

* Preliminary.
Source: *Monthly Labor Review* (January 1973 and January 1974).

ing with recent experience: over the 1968-73 period, about three fourths of the workers with escalator clause contracts, on average, received cost-of-living increases during any given year.

Little information has been assembled concerning the prevalence of escalator clauses outside the Labor Department's on-going survey of major collective bargaining settlements, which encompasses private sector agreements covering 1,000 or more workers. It is, however, possible to make some plausible estimates of the escalator coverage in the private nonfarm sector of the economy. Roughly speaking, the approximately 10 million workers included in the major collective bargaining settlements survey probably account for something like half of the total number of persons coming under private, nonfarm collective bargaining agreements.[2] Assuming that the proportion of workers in the smaller bargaining units with escalator clauses in their contracts is similar to that of the major agreements population, total escalator coverage in both large and small contracts could be about 8 million workers, of whom 6 million would actually get such increases in 1974. In all likelihood, however, escalator clauses are much less prevalent in contracts covering fewer than 1,000 workers.

There are numerous variations on the theme of contractually adjusting wage levels to changes in living costs. Labor contracts between the United Auto Workers (UAW) and the major auto producers contain the oldest major escalator clauses in existence. In 1948,[3] the UAW and General Motors (GM) reached a key agreement which provided for an "annual improvement factor" in automotive workers' standard of living. To insure that the contractual increases stated in nominal terms would translate into real wage gains, the contract stipulated a series of regular reviews whereby wages were to be automatically adjusted to changes in the BLS consumer price index (CPI). The current agreements between the UAW and the major auto producers were renegotiated last year and call for a one cent wage hike with each 0.3 index point (not percentage) rise in the CPI. Furthermore, the current agreements are open ended insofar as they set no maximum on the amounts that can be paid out under the escalator clauses. According to the Labor Department, close to half of the 4 million workers under major contracts with escalator clauses currently face maximums on the amounts that can be paid out under the contracts. The two-year contract signed by the United States Postal Service in mid-1973 provides for an unlimited cost-of-living adjustment of annual earnings, with each 1 percent rise in the CPI giving rise to a $50 increase in annual salary. In what may well prove to be the birth of an important pattern, contracts concluded early this year in the aluminum and steel industries extended the escalator concept to pension benefits.

How big are the payments made under escalator clauses? BLS data indicate that the average wage rate increase resulting from these clauses ranged between 1.6 percent in 1968 and 1969 to 4.1 percent in 1973 (column 2 of

[2] This is broadly consistent with the most recent Labor Department estimates of union membership in the private sector, which totaled about 17 million in 1972. The number of union members in agriculture is very small.
In addition, the Labor Department estimates that there are 600,000 factory workers in nonunion and smaller unionized manufacturing establishments covered by formal cost-of-living escalator arrangements. Outside the private sector, roughly 600,000 United States Postal Service employees come under explicit clauses. It is also worth noting that levels of several important types of nonwage income are linked via escalator-type mechanisms to changes in consumer prices. Pensions paid to about 2½ million retired Federal employees are tied directly to changes in the consumer price index (CPI). Starting in 1975, benefits paid to social security recipients —who numbered almost 30 million persons near the close of 1973 —will automatically reflect movements in the CPI.

[3] See Nelson M. Bortz, "Cost of Living Wage Clauses and UAW-GM Pact", *Monthly Labor Review* (July 1948), pages 1-7, for details. Bortz points out that the UAW-GM Pact was certainly not the first to include an automatic escalator and cites a contract clause from the early 1920's.

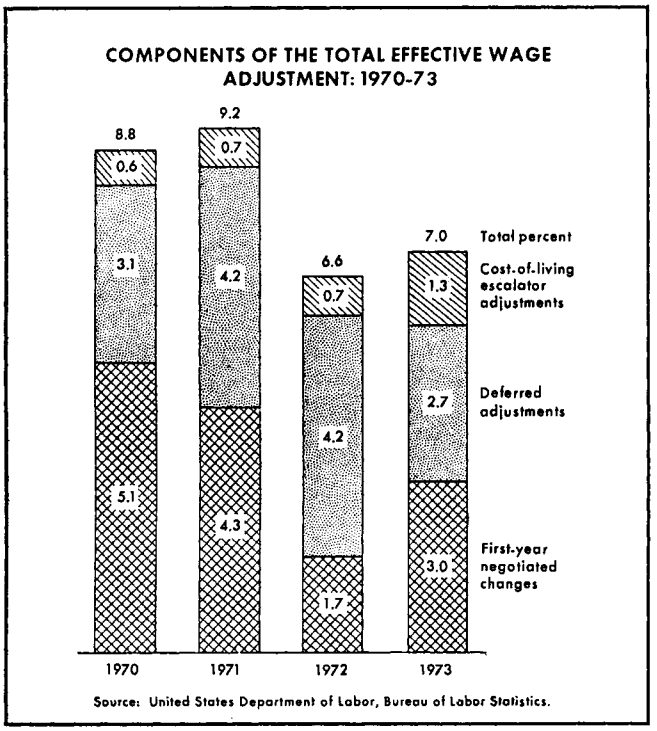


Table II).[4] A good indication of the relatively minor importance of escalator clauses, compared with *total* negotiated wage rate changes, can be obtained from an examination of the Labor Department's "total effective wage adjustment". The total effective wage adjustment (column 5 of Table II) is simply the average wage rate increase received by the major contracts population of approximately 10 million workers during a given year. It represents the sum total of first-year increases negotiated that year, deferred increases inherited from earlier contracts, cost-of-living raises paid out during the year, as well as situations where wages were unchanged or, in some cases, reduced.

Among the important pieces of information contained in the data reported in Table II, the following should be noted. Over the entire 1968-73 period, the CPI rose at an average annual rate of 5.3 percent. At the same time, the average annual wage rate increase granted under cost-of-living escalator clauses came to 2.7 percent, implying an "elasticity" of wages with respect to consumer price increases of 0.5 percent for workers having contractual escalators. However, the elasticity was a somewhat larger 0.6 percent over the 1970-73 period. Because this figure gives increased weight to the more recent years, it was used in most of the calculations reported below. Most escalator clauses build a lag between price and wage changes. That is, payments made in a given month generally reflect consumer price changes that occurred somewhat earlier. Although the precise lag is unknown and varies from contract to contract, an examination of different lag relationships tended to support the choice of an elasticity of approximately 0.6 percent.

During the 1968-73 period, escalator increases accounted for a small portion—0.7 percentage point of the 7.4 percent average—of the annual rise in wage rates for contracts included in the Labor Department's survey of major agreements. In 1973, wage rates of all workers covered by major collective bargaining agreements rose an average of 7 percent. Escalator clauses accounted for only 1.3 percentage points of this rise (column 4 of Table II, which is the arithmetic product of columns 2 and 3), principally because a relatively modest proportion of workers, 31 percent, received payments from escalator clauses. The chart shows the contributions of the three major components to the overall change in the total effective wage adjustment for the years 1970-73. In 1973, when, as noted, the total adjustment amounted to 7 percent and cost-of-living escalators accounted for 1.3 percent, deferred and first-

Table II

WAGE INCREASES UNDER MAJOR COLLECTIVE BARGAINING AGREEMENTS AND RELATED DATA

In percent

Period	Consumer price index (CPI)	Cost-of-living escalators			Total effective wage adjustment
		Average increase	Proportion of workers getting increases	Effective adjustment	
	1	2	3	4	5
1968	4.7	1.6	21	0.3	6.0
1969	6.1	1.6	21	0.3	6.5
1970	5.5	3.7	17	0.6	8.8
1971	3.3	3.1	20	0.7	9.2
1972	3.4	2.0	36	0.7	6.6
1973	6.8	4.1	31	1.3	7.0
1968-73	5.3	2.7	24	0.7	7.4
1970-73	5.2	3.2	26	0.8	7.9

Source: United States Department of Labor, Bureau of Labor Statistics.

[4] Unfortunately, escalator clause data are not available prior to 1968.

Table III

ESTIMATED BEHAVIOR OF ESCALATOR CLAUSES AND IMPACT ON PRIVATE NONFARM HOURLY COMPENSATION UNDER ALTERNATIVE CPI GROWTH RATES

Escalator adjustment	Percentage change in the CPI					
	0	2.5	5	7.5	10.0	12.5
Size of escalator adjustment (percent)	0	1.7	3.0	4.5	6.0	7.5
Impact on hourly compensation (percentage point)	0	0.2	0.3	0.4	0.5	0.7

year increases were responsible for 2.7 and 3 percent, respectively.

THE DIRECT IMPACT OF ESCALATORS ON HOURLY COMPENSATION

With the preceding analysis and some additional information, estimates of the probable impact of escalator clauses on compensation per man-hour can be derived. Compensation per man-hour is the broadest of the wage indexes published by the BLS. It covers production and nonproduction workers alike, encompasses unionized and nonunionized situations, and includes fringe benefits in addition to hourly wage payments. Movements in hourly compensation reflect the impact of escalator clause payments, and the information contained in Table III represents an attempt to isolate and identify the rise in hourly compensation attributable directly to the operation of escalators.

The first row of Table III is based on the assumption that each 1 percent increase in the CPI generates a 0.6 percent increase in compensation for those workers covered by escalators. This "elasticity" for compensation with respect to a change in prices is based on the average relationship observed over the 1970-73 period shown in Table II. The direct impact of escalator clauses on hourly compensation is approximated by weighting the cost-of-living increase by the proportion of private sector workers actually receiving such increases during the year. As mentioned above, about 3 million workers under major contracts will receive escalator increases in 1974. Doubling this to represent the overall private nonfarm population gives a total of 6 million workers, which is about 9 percent of employment in the nonfarm sector. As shown in the bottom row of Table III, the percentage point contribution to hourly compensation is on the small side, rising from 0.2 point when the CPI increases at an annual rate of 2.5 percent to 0.7 point when the cost-of-living increase is 12.5 percent.[5] Overall, in going from a moderate to a very rapid climb in the CPI, the additional impact on hourly compensation is quite mild.

The preceding analysis may overstate the direct impact of escalators on the growth of compensation, especially under the more rapid rates of inflation. Hourly compensation (which includes fringe benefits) might not rise as fast as hourly wages (the basis for Table II) because the costs of some important fringes, such as hospitalization, do not rise with an increase in hourly wages. Furthermore, the response of compensation probably decreases somewhat as the rate of inflation rises under the current structure of labor agreements. As noted previously, many contracts limit the total amounts that can be paid out under escalators during a given year or over the life of the contract.

ADJUSTING THE REPORTED COLLECTIVE BARGAINING DATA

In reporting the results of major collective bargaining settlements, the Labor Department includes only what might be termed "guaranteed" wage (and benefit) improvements in its estimates of the size of first-year and life-of-contract negotiated settlements. Thus, wage and related increases dependent on *future* movements in the CPI via escalator clauses are not incorporated into the BLS estimates. Except in the context of the effective wage adjustment, noted above, historical data on negotiated changes do not include the cost-of-living increases which actually did accrue.

Some indication of how the published collective bargaining data would behave under alternate assumptions about the future behavior of the CPI can be derived, nonetheless. The second and third columns of Table IV show those changes in wage rates alone and in wages and benefits combined actually reported by the BLS for major settlements reached in 1973. As mentioned, these data *do not* include any escalator wage changes which depend on *future* movements in the CPI. The next two sets of columns (columns 4-7) give judgmental estimates as to how the data might look under an annual average increase in the CPI of 5 percent during the life of the contracts and, arbitrarily, when the CPI rises twice as fast.

[5] The impact in a particular quarter could be greater than this, however, if cost-of-living increases are distributed unevenly over the year.

A number of simple, but realistic, assumptions provided the foundation for these judgmental estimates. As described earlier, each 1 percent rise in the CPI was assumed to generate a 0.6 percentage point increase in wages for workers having escalators—the "elasticity" assumption remained the same. The total package of wages and benefits combined is probably less sensitive than wage rates alone to changes in the CPI, however. Accordingly, each 1 percent rise in the CPI was assumed to be associated with only a 0.4 percent increase in wages and benefits.[6] It was noted above that the costs of certain important fringe benefits are not directly affected by the existence of escalator clauses. Since many contracts provide for at least some cost-of-living money to be paid out during the *first year,* half the amount that would be forthcoming if escalators were allowed to be fully operative under the previous assumptions was added to the first year. Finally, contract duration was assumed to average two years in nonmanufacturing, largely because of the switch toward one-year construction agreements that began with the operation of the Construction Industry Stabilization Committee in early 1971, and three years in manufacturing.

Table IV shows the impact of these assumptions on the reported collective bargaining data. The upward adjustment to wage rates in contracts with escalator clauses is quite sizable. As seen by comparing columns 3, 5, and 7, the life-of-contract wage increases for manufacturing con-

[6] In examining hourly compensation, which includes fringe benefits, an elasticity of 0.6 was assumed. Of course, the smaller elasticity of 0.4 would reduce the impact of escalators on hourly compensation even further.

Table IV

PERCENTAGE INCREASES IN MAJOR COLLECTIVE BARGAINING SETTLEMENTS: ACTUAL AND HYPOTHETICAL FOR 1973

Sector	As reported:			Hypothetical case I CPI rises at 5 percent annual rate		Hypothetical case II CPI rises at 10 percent annual rate	
	Number of workers* (millions)	First year	Life of contract	First year	Life of contract	First year	Life of contract
	1	2	3	4	5	6	7
Manufacturing:							
Wage rates	2.4	5.9	4.9	6.8	6.4	7.7	7.8
Contracts with escalators	1.4	5.4	4.2	6.9	6.7	8.4	9.2
Contracts without escalators	1.0	6.7	5.9	6.7	5.9	6.7	5.9
Wages and benefits	1.6	7.0	6.0	7.7	7.2	8.4	8.4
Nonmanufacturing:							
Wage rates	2.9	5.7	5.3	6.0	5.8	6.3	6.3
Contracts with escalators	0.6	6.5	6.3	8.0	8.6	9.5	10.8
Contracts without escalators	2.3	5.5	5.1	5.5	5.1	5.5	5.1
Wage and benefits	1.8	7.1	6.2	7.4	6.6	7.6	7.0
All industries:							
Wage rates	5.3	5.8	5.1	6.4	6.1	6.9	7.0
Wages and benefits	3.4	7.1	6.1	7.5	6.9	8.0	7.7

Note: Because of rounding sums of individual items may not equal totals.

* Wage rate data pertain to contracts covering 1,000 or more workers, while combined wage and benefit data are for contracts covering 5,000 or more workers.

tracts with escalators rise from the reported annual gain of 4.2 percent to 6.7 percent when the CPI is assumed to grow at a 5 percent annual rate (hypothetical case I) and to 9.2 percent when the cost of living climbs twice as fast (hypothetical case II). However, the bottom lines of Table IV indicate that the implications for all major contracts combined, i.e., those with and without escalator clauses, are a good deal less dramatic. For all industries, and all contracts, a 5 percent rise in the CPI adds 0.8 percentage point to the average life-of-contract growth in wages and benefits (an actual rise of 6.1 percent compared with a hypothetical 6.9 percent). This difference rises to 1.6 percentage points (actual of 6.1 percent *vs.* the hypothetical of 7.7 percent) when the CPI climbs 10 percent per annum. A fundamental reason for this relatively minor overall impact is the fact that only a minority of workers have escalator clauses in their contracts.

Table IV provides only ambiguous answers to the important question of whether wages rise faster or slower under escalator arrangements. However, even if it could be definitely shown that wages rise more rapidly in contracts with escalators, this does not necessarily imply that these mechanisms intensify inflationary pressures. If, as some have suggested, the presence of an escalator clause in a contract is directly related to the degree of union bargaining power, then it might well be that the greater bargaining power—and not the escalator clause—was the source of the higher wages. That is, unions with considerable bargaining power would succeed in getting higher wages with or without escalator clauses in their contracts.

SUMMARY AND CONCLUSIONS

The major findings of this article can be summarized in the following points. However, as emphasized above, it is critical to distinguish those conclusions based directly on *facts* derived from published or readily available Labor Department data from those resting on reasonable *assumptions* tied to the facts. It is also important to note that, since the incidence and elasticity of escalator clauses appear to be increasing, the impact of the clauses may well be on the rise.

(1) In terms of coverage, approximately 4 million, or 40 percent, of the workers covered by major collective bargaining contracts as of the end of 1973 had escalator clauses in their contracts. As in other recent years, only about three fourths of the workers with escalator provisions are expected to receive cost-of-living wage increases during the course of 1974. Accordingly, it seems reasonable to infer that at most only about one in every eleven workers in the private nonfarm sector as a whole will get a contractual cost-of-living wage increase this year.

(2) As far as the actual size of escalator payments is concerned, Labor Department data for the 1968-73 interval indicate that, in the face of a 5.3 percent annual rise in the CPI, the average cost-of-living wage rate increase came to 2.7 percent. Since these raises accrued to a minority of the workers covered by major labor contracts, they accounted for 0.7 percentage point of the 7.4 percent annual wage increase averaged over the period from all provisions in major collective bargaining agreements which actually took effect during those five years, i.e., first-year increases, guaranteed deferred raises, and cost-of-living hikes.

(3) When these and related facts are combined with certain reasonable assumptions, the following picture emerges. The direct impact of escalator clauses on economy-wide wage levels is at this point comparatively small. For example, a rise in the rate of consumer price inflation from 2.5 percent to 12.5 percent per year would—via the *direct* linkages provided by escalator clauses—add only 0.5 percentage point to the growth of private nonfarm compensation per hour of work. It should be emphasized again, however, that this does not take into account any "spillover" effects that might occur if, for example, firms routinely grant workers outside the bargaining unit wage increases commensurate with those given to employees covered by contractual escalator clauses. Nor does it tell anything about the broader issue of whether escalators exacerbate or mitigate the inflationary process.

While hourly compensation includes pay increases stemming from escalators, the results of current collective bargaining settlements reported by the Labor Department for major agreements do not. That is, only guaranteed wage and benefit improvements are averaged into the estimates of negotiated increases (reported on a quarterly basis) so that contractual increases entirely and directly dependent on future movements in the CPI via escalator clauses are not included in these figures. On the basis of the assumptions outlined above, "pricing in" cost-of-living escalators has a substantial impact on the life-of-contract gains accruing to those workers covered by escalator clauses. However, because such workers are in the minority, the impact on all major contracts, i.e, those with and without escalators combined, is noticeably smaller. During 1973, the average life-of-contract wage and benefit increase reported by the Labor Department was 6.1 percent. The adjustments outlined in the body of this paper suggest that a 5 percent average annual rise in prices over the life of these contracts would add approximately 0.8 percentage point to this figure, while a 10 percent climb in the CPI would add about 1.6 points.