FRBSF Weekly Letter

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Low Wage Inflation

Wages in the U.S. have risen very slowly over the 1980s in relation to the general price level. Indeed, by some measures real, i.e., inflation-adjusted, wages have fallen over this period. However, these measures have ignored employee benefits, the share of which in total compensation has been increasing. Compensation per hour — which includes both wages and benefits — rose by 0.6 percent per year over the period 1980-1987, as against 2.9 percent per year over the period 1952-1972.

This decline in real wages has been more pronounced in the unionized sector of the work force. Since the collective bargaining agreements signed during the early 1980s, workers have made enormous concessions. Cost-of-living adjustments and non-wage benefits have been reduced and there is a burgeoning reliance on profit-sharing agreements that impart more flexibility to compensation.

The bargaining climate itself has altered in fundamental ways. Workers have made nonpecuniary concessions and have agreed to many changes in work rules. The share of the unionized work force in total employment has fallen from 25 percent in1981 to 19 percent in 1986. While this decline reflects in part the declining share of the heavily unionized manufacturing sector in total employment, the unionization rates within manufacturing industries have also been falling. Furthermore, the estimated time lost in work disputes as a fraction of total working time has fallen from 0.09 percent in 1980 to 0.02 percent in 1987; this ratio averaged 0.14 percent in the preceding thirty years.

Declining productivity growth and the adverse effect of dollar depreciation during 1980-1985 on the manufacturing sector have been offered as explanations for the slowdown in real wage growth. This *Letter* analyzes the validity of these explanations and finds that they are not fully satisfactory. It goes on to investigate the importance of other factors, namely, a decline in jobless benefits and, to a lesser extent, the deregulation of many sectors of the economy.

Decline in productivity growth

The decline in productivity growth and real wages dates back to the early 1970s. The productivity decline has been attributed in part to the oil crises (starting in 1973) and in part to the changing demographic and sectoral composition of employment. The rising share of women and teenagers, who are less experienced and less productive than prime age males, as well as the rising share of unskilled service sector jobs are believed, by some analysts, to have reduced productivity and, thereby, wages.

The interaction between real wages and productivity is complex. European countries, for example, have also been adversely affected by oil shocks, yet real wage growth in their economies has not decelerated to the extent it has in the U.S. Although declining productivity growth due to rising oil prices has played an important role in the deceleration of real wage growth over the 1970s, its importance for the 1980s is questionable because, adjusted for inflation, oil prices have fallen in the first half of the 1980s.

Besides, real wages have stagnated for all categories of workers. The rising share of less productive teenagers and women, and the rising share of the service sector in total employment are not valid explanations of real wage behavior. In the manufacturing sector, productivity has risen enormously in the 1980s due to the modernization of plants and the scrapping of obsolete ones. Excess labor has been permanently laid off. Yet real compensation per hour in manufacturing, over the 1980-1986 period, increased by 3.6 percent — lower than the economy wide increase of 4.3 percent. Clearly, declining productivity growth plays a smaller role in explaining low real wage growth in the 1980s.

The dollar

The appreciation of the dollar during 1980-1985 did play a part in reducing wage inflation over that period. It contributed to disinflation, which affected wages via formal or informal cost-of-living adjustments, and led to higher unemploy-

ment in the export and import-competing industries.

However, there is no compelling evidence to indicate that the wage concessions of the last five years were motivated mainly by the weakness of the export and import-competing industries, with their concomitant high unemployment. Concessionary contracts extend over a wide range of industries, many of which are not exposed to foreign competition, such as domestic air travel and retail food stores. A study by Philip Cagan reveals that a wage index constructed for foreign-competing industries rose at the same rate as a wage index for all manufacturing over 1979-1985.

In brief, neither the strong dollar nor declining productivity growth provide a fully satisfactory explanation of the decline in real wage growth over the 1980s.

Jobless benefits

A dramatic decline has occurred over the 1980s in the availability of jobless benefits, which are granted primarily to job losers — those on temporary and permanent layoff who have worked for a stipulated length of time — and, in some cases, to job leavers. A decline in such benefits induces many laid off workers to accept alternative, lower paying jobs — and often lower status jobs as well — more quickly, or to negotiate a lower wage with their previous employer in order to get rehired.

Regular benefits are available for approximately twenty-six weeks; after they have been exhausted, extended benefits are provided for approximately another thirteen weeks. Beyond that, federal supplemental programs have provided benefits of varying duration up to twenty-six weeks. The availability of extended and supplemental benefits differs greatly across states.

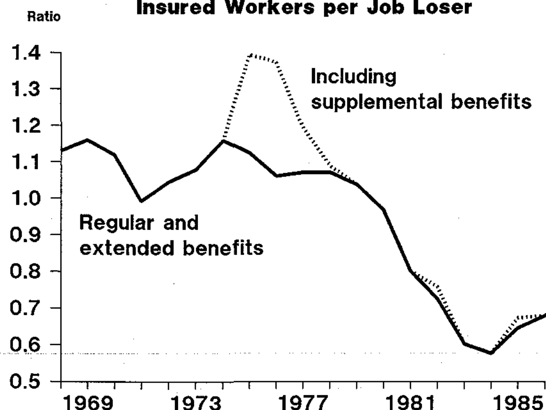
As can be seen in Chart 1, the ratio of insured unemployed workers to total job losers has declined over the last decade, and especially over the 1980s. Changes in this ratio do not reflect only changes in policy. In the course of a recession this ratio falls as more and more job losers run out of benefits, it rises during the subsequent expansion as the share of long-term unemployment decreases. The effect of policy can be gauged by making a cyclical adjustment and comparing the availability of benefits at the same aggregate unemployment rate. Thus, in 1977 when the aggregate unemployment rate was 7.1 percent, the ratio (including supplemental benefits) was 1.20; in 1985, at an aggregate unemployment rate of 7.2 percent, the ratio was 0.67.

The insured unemployment rate (IUR) plays an important role in the provision of benefits. The IUR measures the ratio of the number of unemployed receiving regular benefits to covered employment, i.e., those jobs covered by unemployment insurance (UI) plans. Prior to 1981, extended benefits were granted in a state when the nationwide IUR reached 4.5 percent, or when the IUR in that state reached 4 percent. A major revision of the UI law in 1981 eliminated this national "trigger" and further raised each state's IUR trigger to 6 percent. Hence, at the end of 1982, only fourteen states were offering extended benefits whereas, without the change in law, all of them would have.

In addition, federal supplemental benefits, which during the 1975 recession were available up to twenty-six weeks in many states, were drastically reduced during the 1982 recession, varying between eight and sixteen weeks, although the latter recession was much more severe.

Finally, there has been a decline in the availability of even regular benefits, although they have not been affected by the new law, apart from the imposition of federal taxation since 1979. The fall in the IUR, relative to the total unemployment rate, has reinforced the effect of raising the state triggers.

The IUR may have fallen because applications for benefits are being scrutinized more carefully to weed out more claims. This, in turn, may have discouraged the unemployed from applying for benefits. As you can see in Chart 2, the ratio of initial claims for (regular) UI to the number of short-term job losers (unemployed for 0-5 weeks) has fallen along with the ratio of beneficiaries to job losers. Finally, as Gary Burtless



pointed out in an exhaustive survey of this issue, there may be greater difficulty in obtaining benefits because of a reduction, due to budgetary cuts, in the number of offices through which these benefits are administered.

Deregulation

Another important development that has indirectly affected the labor market is the deregulation of numerous industries: trucking, airlines, securities, etc. Deregulation has put pressure on costs, leading firms to make fewer concessions to union demands than they did previously and to hire more non-union workers. The competition spurred by deregulation, has been a motivating factor behind many of the wage concessions. Over 1981-1986, wage inflation was highest for state and local government workers who are relatively immune to the prospect of unemployment. Also, in contrast to the private sector, these workers' unionization rate has been increasing.

Policy implications

There has been increasing concern that, in the current economic environment, wage inflation may accelerate. At 5.8 percent in December 1987, the civilian unemployment rate has been at its lowest level since 1979, at which time inflation *was* accelerating. Another source of concern is that current and prospective dollar depreciation, by raising price inflation, will raise wage inflation.

The structural changes discussed above suggest that the tightness of the labor market cannot be assessed merely by an extrapolation of past experience. Furthermore, due to fewer, and smaller, cost-of-living adjustments, the effect of dollar depreciation on wage inflation may be weaker now than during the dollar depreciation of 1977-1978.

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Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 12/30/87	Change from 12/23/87	Change from 12/31/86 Dollar	Change from 12/31/86 Percent[7]
Loans, Leases and Investments[1] [2]	207,821	– 169	– 6,416	– 2.9
Loans and Leases[1] [6]	184,030	33	– 9,535	– 4.9
Commercial and Industrial	52,554	121	– 4,624	– 8.0
Real estate	72,538	– 123	4,621	6.8
Loans to Individuals	37,648	167	– 4,312	– 10.2
Leases	5,450	13	– 141	– 2.5
U.S. Treasury and Agency Securities[2]	16,421	– 255	2,953	21.9
Other Securities[2]	7,370	54	164	2.2
Total Deposits	209,812	1,484	– 14,081	– 6.2
Demand Deposits	55,242	1,629	– 12,968	– 19.0
Demand Deposits Adjusted[3]	39,296	2,980	– 2,425	– 5.8
Other Transaction Balances[4]	20,217	24	164	0.8
Total Non-Transaction Balances[6]	134,353	– 169	– 1,277	– 0.9
Money Market Deposit Accounts—Total	43,898	16	– 3,204	– 6.8
Time Deposits in Amounts of $100,000 or more	31,647	– 191	– 761	– 2.3
Other Liabilities for Borrowed Money[5]	19,453	302	– 7,523	– 27.8

Two Week Averages of Daily Figures	Period ended 12/28/87	Period ended 12/14/87
Reserve Position, All Reporting Banks		
Excess Reserves (+)/Deficiency (–)	37	114
Borrowings	15	4
Net free reserves (+)/Net borrowed(–)	22	110

1 Includes loss reserves, unearned income, excludes interbank loans
2 Excludes trading account securities
3 Excludes U.S. government and depository institution deposits and cash items
4 ATS, NOW, Super NOW and savings accounts with telephone transfers
5 Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources
6 Includes items not shown separately
7 Annualized percent change