Observations on Unemployment: Burdens and Benefits
Bibliography


Assuming responsibility for the establishment of a trade-off between inflation and unemployment is difficult for the policy maker because inflation affects everyone, while unemployment most immediately affects only those who cannot find a permanent job. The question is then, how serious are the burdens placed on the relatively few who are laid off in order to improve conditions for the society as a whole? Observations are made on the nature of unemployment compensation, the overall impact of unemployment benefits, and some of the choices and problems the unemployed individual must face.
1974
An unusually strong farm sector in 1973 bolstered the district's economy in the first half of 1974 but did not completely insulate the region from the weaker economic conditions in the nation as the year progressed.

With farm incomes at record highs, consumer spending increased and deposit inflows to thrift institutions were better here than in the nation. This led to a buildup in loan commitments, so that the decline in homebuilding was less pronounced in the region than nationally.

District manufacturing sales increased much more than the nation's, since the region relies little on the currently depressed automobile industry.

District employment grew, but the labor force experienced even larger gains (possibly reflecting the pinch of higher prices), and an increase in the unemployment rate resulted.

As 1974 progressed, the effects of the national economy on the region increased. Manufacturers' inventories began to accumulate, and unemployment grew. Consequently, retail sales deteriorated.

Poor weather conditions took their toll in the district and reduced crop yields. Although high crop prices made up for the shortfall, production costs increased, dropping net farm income below 1973's record levels. Nevertheless, most farmers, except those in the livestock sector, were in good financial condition at the end of the year.

1975
What will happen in the farm sector? This is the big question for 1975, due to uncertainties about worldwide demand, weather conditions, and the complex interactions between the livestock and feed grain components. But it is fairly certain that meat supplies will be as high as in 1974 and that crop prices will remain strong through the first half.

The recovery in deposit inflows will probably have little impact on homebuilding in early 1975. District thrift institutions appear to be repaying heavy borrowings before making new loan commitments; this will postpone an upturn in new mortgages.

District manufacturers are not as optimistic as a year ago and anticipate lesser sales gains. It appears also that high prices may mean little real growth. As a result, employment growth will continue to slow, and the unemployment rate will move up through the first half of the year.

Agriculture
The big story in agriculture for 1974 was the shortfall in feed grain production. National production was down from 1973 levels by 18 percent for corn, 35 percent for sorghum, and 25 percent for barley. Low initial inventories of most feed grains brought supplies (current production plus initial stocks) down even further.

These tight feed grain supplies forced cutbacks in livestock industries. Whenever economical, producers were using alternative feeds such as grass or other forage.

Producers also cut back operations by increased slaughter. Total cattle and hog slaughters were up from 1973 by 8 and 6 percent, respectively. Lower grain-fed steer and heifer slaughter was offset by the increased slaughter of cows and calves.
High feed prices also caused cutbacks in the turkey and poultry industries. Total production of turkeys, a record in 1974, will be down in 1975.

These cutbacks in livestock and poultry production will reduce domestic demand for the nation’s feed grain output. High feed grain prices also caused a decline in exports. At the close of 1974 feed exports were about 80 percent of 1973’s rates; they are now projected at about 30-32 million tons for the 1974-75 crop year, down from 44.4 million tons in 1973-74. In order for current supplies to last through the marketing year, the utilization of all feed grains, domestic and foreign, must fall by about 18 percent.

Feed grains were not the only crops for which 1974 production was disappointing. Production of most of the oilseeds—soybeans, cottonseed, and flaxseed—was down in the nation. Soybean production was off 21 percent from the 1973-74 crop year.

Flax supplies last year were the smallest on record, and prices were the highest. This was a boon to Ninth District farmers since most of the nation’s flax is produced in this region.

Soybean exports are expected to fall slightly short of 1973-74’s record level by the close of the current crop year. Total utilization is expected to approach the year-ago level, and carryover to next September is projected to be about two weeks utilization. With producers storing much of their output, farm prices should be high through the remainder of the crop year.

Wheat production in the nation was a record 1.8 billion bushels last year, up 4 percent from 1973. With initial stocks lower than before, supplies were down from 1973. Further deterioration in worldwide crop conditions increased demand late in 1974. As a result, wheat will continue in relatively short supply and prices will remain fairly strong—at least until the beginning of the new crop year.

The tight grain situation kept crop prices strong in 1974. But livestock prices, especially for red meat, were far below mid-1973 levels. Final 1974 cash receipts from farm marketings should be up about 4 percent in both the district and the nation, since higher prices largely offset the shortfall in crop production. However, according to preliminary nationwide estimates, higher production costs will force net cash income down.

With some exceptions, farmers were in good financial condition at the close of 1974, and farmers with crops to sell were in a strong cash-flow position. Cow-calf operators sustained operating losses last year but, unlike many feedlot operators, often had substantial real estate equity to fall back on.

Equity gains of farmland owners were extraordinarily high in the past year. Ninth District gains in farmland values from November 1973 to November 1974 ranged from
27 percent in South Dakota to 36 percent in North Dakota; however, much of that increase took place in the first half of 1974.

The outlook for 1975 depends largely on interactions between the feed grain and livestock components of the farm economy. High feed prices, as experienced in 1974, encourage cutbacks in livestock operations, which in turn reduce the demand for feed grains. So, reaching a stable equilibrium will not be easy.

Despite rising feed costs, meat supplies in 1975 should be about as high as last year. Fewer sows farrowing will reduce pork supplies in the first half. The slower response of the cattle industry to high feed prices should sustain beef supplies, but with a higher proportion of the nation’s cattle herd being carried on grass, supplies will be highly sensitive to range conditions and more variable than in the past.

Tight supplies, strong domestic and export demand, and a large number of farmers holding crops and hoping to obtain the highest returns indicate that crop prices should remain good through the first half of 1975.

Rising input prices, a continuing shortage of merchant-dealer credit, and some refinancing needs will keep demand for farm operating loans strong through the first half. Loan demand for capital inputs will probably be down, not only because of declines in net farm income but also because of relatively recent existing capital inputs.

For now, few are looking beyond the first half of 1975 because of the obvious uncertainties about world agricultural and economic conditions, domestic crop prospects, and the degree to which heavy domestic livestock slaughter might reduce feed grain demand in the second half.

**Industrial Activity**

District manufacturers entered 1974 expanding payrolls and worrying about shortages in the face of rising sales, but by year-end, unwanted inventories, softening sales, and prospects of declining payrolls weighed more heavily on their minds.

Our November Quarterly Industrial Expectations Survey reported district manufacturing sales up around 20 percent through third-quarter 1974; on the national level sales increased 15 percent in the first 10 months of the year. The relatively small effect auto production declines have on this region compared to the nation is indicated by recent durable goods sales data: sales rose 24 percent in the district and only 10.2 percent in the nation.

Nondurable goods sales advanced 16 percent in the district. The larger national increase of 20.8 percent resulted in part from large price increases in the petroleum industry, which is relatively unimportant in this district.

Much of these sales gains can also be attributed to rising prices. The U.S. wholesale
price index for manufacturing goods in 1974 was about 19 percent above the 1973 level.

District manufacturing activity experienced some growth in 1974. Manufacturing employment was up 4.5 percent from a year ago in the district and only 0.3 percent in the nation. District industrial concerns made sizable investment increases, as well, and development agencies reported that total capital expenditures for new and expanding facilities in both Minnesota and South Dakota were up 20 percent from year-ago levels for the first nine months of last year.

Much of 1974's strength, however, occurred in the first six months. District manufacturing employment increased through May and declined 1.5 percent between May and November. Further, several district manufacturers have recently either laid off workers or reduced working hours. Nevertheless, the district has not yet experienced declines in manufacturing employment as severe as those in the nation.

District manufacturing activity in 1975 will probably fall from the high levels reached at the beginning of the past year. In the last Industrial Expectations Survey, 33 percent of the respondents considered inventories excessive in light of anticipated sales as contrasted to 11 percent a year earlier. They anticipated 1975 sales to be up 15.5 and 12.9 percent in the first and second quarters.

In each post World War II recession, district manufacturing employment has declined, and the current recessionary period will be no exception. In 1969-70 the district lost approximately 40,000 manufacturing jobs, many related to defense cutbacks; but since defense spending is not a significant factor in this recession, the dropoff will be less severe.

Finance

Thrift Institutions
Deposit inflows to thrift institutions held up better in the Ninth District than in the nation last year. Deposits at district S&Ls increased at a seasonally adjusted annual rate of about 10 percent, essentially the same as in
1973, while at thrift institutions in the U.S. deposits slowed to about 5 percent from 9 percent a year earlier. District deposits were boosted by the 15 percent growth at non-Twin Cities S&Ls, effected largely by 1973's high district farm incomes.

In the nation and the district, deposit inflows were adversely affected by disintermediation (the shifting of savings to higher-yielding investments) during the second and third quarters. Growth dipped to an average annual rate of 6 percent, but by year-end inflows were rising once again and growth was back up to about 10 percent.

Mortgage loans made at S&Ls were 6 percent below year-ago volumes in the district and down 19 percent in the nation. The district's better showing resulted from both a higher rate of savings inflow and a larger buildup of loan commitments in early 1974.

Mortgage loans for the year as a whole, though not much weaker than for 1973, declined during the year. Seasonally adjusted, the annual rate for the second half of 1974 fell by about one-third from the first half, as new loan commitments were cut back in response to weakening deposit inflows.

The stated rate on FHA-VA mortgage loans was reduced from 9½ to 9 percent in late November, partly as a reflection of the general decline in interest rates and partly as a stimulus to housing activity. Moreover, points charged on these loans were down to a 3 to 6 range at year-end from a 6 to 7 range at the end of September.

Deposit inflows began to recover toward the end of 1974, but loan commitments had not then increased, nor are they likely to increase significantly during the first quarter of 1975. Apparently S&Ls want to reduce their large volume of borrowings and increase their liquid assets before expanding their lending operations. A turnabout in new mortgage loans normally lags an upturn in commitments by about three months, so a recovery in housing is unlikely until after midyear.

**Commercial Banks**

Loan growth at district member banks in 1974 slowed to a 12 percent annual rate from 18 percent in 1973, about the same decline as in the nation. Most of these declines occurred in the second half.

The second half slowdown affected most district banks. Responding to market and regulatory concern over the liquidity positions of major regional banks in the nation, large district banks tightened loan and commitment policies and kept prime rates above those of money market banks.
As a result, business loans declined at an annual rate of 6 percent in the first half of 1974, after rising at an annual rate of 16 percent during 1973 and the second half of 1974.

Growth in total loans at rural and small city banks also slowed, from 14 percent in the first nine months of the year to a 6 percent annual rate in the fourth quarter, reflecting a decline in the supply of bank loan funds due to the slowdown in deposit growth in the second half of 1974.

Liquidity positions of district city banks, as measured by the proportion of negotiated funds to loans and investments, also weakened during the first half of 1974 but strengthened over the second half.

The continued weakening in district economic conditions is likely to be accompanied by a decline in the demand for district bank loans in the next few months. Business loan demand, to the extent that it reflects demand for working capital, should ease as undesired inventories are worked down.

Growth in demand and time deposits should rise as market interest rates on alternate investments fall. As a result, interest rates and other terms and conditions on district bank loans should ease in early 1975.

**Construction**

Like other sectors of the district economy, construction increasingly felt the effects of the national recession. While construction activity remained somewhat stronger here than nationwide, the district’s relatively better performance declined somewhat through the end of 1974.

District building permits issued late in 1974, though essentially unchanged from year-ago levels, were largely for additions and alterations to existing structures. New residential building permits reached levels 8.5 percent below a year earlier, with the greater declines occurring in multifamily structures. The resulting total net decline was almost 13 percent. Nonresidential building permits were only slightly under year-ago levels.

In contrast with earlier months, the declines in permits issued began to be reflected in current dollar valuation, and toward year-end the dollar valuation of district building permits was only 5.0 percent ahead of a year before.

On the national level, the already depressed housing industry showed no improvement as the year ended. Housing starts fell to an eight-year low, while new building permits issued fell 48 percent...
The district’s construction industry deteriorated in 1974, but not as badly as the nation’s.
Cumulative New Housing Units Authorized, Seasonally Adjusted

below year-ago levels to the lowest point since 1960.

By year-end nonresidential construction, which had been compensating somewhat for the serious slump in housing, began to decline as well. By late fall contract awards for future construction of all types had fallen 18 percent from a year before.

Significant improvement in the construction industry will require both lower mortgage rates and stabilization of construction costs.

Some hope has been generated recently by the evidence of reintermediation at thrift institutions, due primarily to a narrowing in yields on deposits, and the easing of other market rates. However, since the savings inflows associated with reintermediation are currently being used to repay borrowings and rebuild liquidity, any significant new commitments to housing markets will be delayed.

Construction costs have not yet begun to stabilize. Even though some input prices, such as lumber, have recently been dropping, others, such as steel and labor, have continued to increase.

In the past, upturns in residential construction have preceded general economic recovery by several months. If this pattern is repeated, housing starts should begin to rise by late spring in order for a general recovery to occur in the second half. However, further erosion of consumer attitudes caused by growing unemployment and rising inflation could cause postponement of home buying, delaying housing recovery until well past midyear.

Consumer Spending
Last fall’s decline in farm income from 1973’s unusually high levels resulted in a sharp slowdown in Ninth District personal income gains. While in the first half of 1974 district personal income rose faster than that of the nation, declines in the Dakotas and very small increases in Minnesota and Montana were evident into the fourth quarter. As a result, totals were down toward year-end.

For the four complete district states, personal income increased only 4.7 percent through the beginning of the fourth quarter over a year earlier, compared to an 8.8 percent increase for the nation.

To worsen the situation somewhat, prices for consumer goods rose more than district personal income over the last year and caused a decline in consumer buying power. By the latest (early fourth quarter) report, the Twin Cities consumer price index (CPI) had risen 13.1 percent above its year-ago level, while the U.S. CPI had risen 12.2 percent. Sharper price increases for food and apparel were mainly responsible for the accelerated pace of the Twin Cities CPI.

National consumer confidence surveys taken in late 1974 recorded unprecedented levels of consumer pessimism. Apparently the deepening pessimism in the nation was largely attributable to
jumps in the unemployment rate in late 1974, while consumer sentiment in the district was influenced more by soaring inflation.

In line with the relatively greater increases in personal income, Minnesota’s retail sales gains also exceeded those for the nation in the first half of 1974. The rate of retail sales gains in Minnesota fell below the national gains in the beginning of the fourth quarter, with Minnesota’s retail sales 10.5 percent above a year earlier and the nation’s sales 7.3 percent above the year before.

This weakening trend was revealed in our survey of various retailers, as well. Many reported sales had exceeded the estimated 8 to 10 percent price rise until mid-November, when unit sales deteriorated markedly. December sales gains for most stores were small. There was a last minute surge in buying, but since it was stimulated largely by preholiday price reductions, profit margins on total sales were reduced.

By late fall car sales had declined in the district almost as much as the 25-30 percent drops experienced in the nation. A few dealers reported smaller sales declines, but generally sales were down and inventories were piling up throughout the district.

It was reported by district resort owners that neither the dollar volume of business nor attendance increased as much as usual through the fall of 1974.

Rapid inflation, smaller personal income gains, and rising unemployment were taking their tolls in the district as 1974 ended. Only resort owners were optimistic about their 1974-75 winter season and the 1975 outlook. Both retailers and auto dealers were uncharacteristically conservative about the sales outlook. On the whole, consumers and their merchants appear to be entering 1975 in a somber mood.

Labor Market
The district’s economy avoided the very large increases in unemployment that occurred in some parts of the country in 1974, and employment grew by 3.4 percent compared to 3.6 percent in 1973. Nationally total employment increased 2.1 percent last year, following a 3.3 percent gain in 1973.

The greater relative growth in district employment partly stemmed from the fact that the district was less severely affected than the nation by the oil embargo of early 1974, the cutbacks in automobile production, and the downturn in housing construction. District manufacturing and construction employment increased 4.5 and 2.7 percent in 1974, compared to a 0.3 percent increase and a drop of 0.6 percent nationally. Furthermore, the large gains in farm income in 1973 and early 1974 helped bolster district trade and service employment during the year.

Despite a large overall increase in employment for the year, the district was not immune from the downturn in the national economy, and district labor market condi-
Seasonally adjusted, the unemployment rate averaged 5.8 percent in the last quarter after a 5.2 percent average in the first. Initial claims for unemployment insurance reached record highs in the fourth quarter and were 23 percent greater than a year earlier. In addition the district’s help wanted advertising index fell 27 percent from the beginning of the second half.

District labor market indicators at the close of 1974 pointed to further increases in unemployment, as the recession deepens and spreads throughout the economy.

Judging from past recessions and the current outlook, district employment will probably increase only modestly in 1975, if at all. The degree to which the unemployment rate rises will depend to a large extent on labor force growth.

If the labor force increases at the 2.6 percent annual rate experienced during 1970-74 and employment rises at a modest pace as in the 1960-61 and 1969-70 recessions, the district’s unemployment rate could average above 7.0 percent in 1975. Also, unemployment could be expected to jump sharply during the first half of the year and then level off, assuming the downturn in national economic activity will bottom out in mid- to late-1975.
Observations on Unemployment: Burdens and Benefits

Thomas M. Supel

*It is the continuing policy and responsibility of the Federal Government to use all practical means . . . to coordinate . . . conditions under which there will be afforded useful employment opportunities, including self-employment, for those able, willing, and seeking to work, and to promote maximum employment, production, and purchasing power.*

The economic policy set forth in this statement implies the responsibility of establishing a trade-off between inflation and unemployment. It is difficult for the policy maker to place a value judgment on the trade-off because inflation affects every individual in the society, while unemployment most immediately affects only those individuals who are unable to find and keep a job. Since a relatively few individuals bear the cost of improving the lot of the entire society by being laid off, an important issue is this: How serious is the cost borne by those who are unemployed?

This brief review of the unemployment compensation system focuses on the cash payments received by those unemployed persons who qualify for benefits under the present structure. Since unemployment compensation payments are not taxable, the level of payments is related to after-tax income. Some perspective of the loss in purchasing power that an unemployed individual suffers will be gained from this view.

Because this article focuses on only one facet of unemployment, the reader is cautioned to keep in mind other aspects of the unemployment issue before reaching a conclusion about the quality of the system as a whole. For example, many unemployed persons do not qualify for unemployment compensation payments. Others may have received payments for a while but have been unemployed long enough to have exhausted their benefits. Also, society may benefit from financing a worker's job search when a job is found that suits the individual rather than one that is accepted simply to get off the unemployment rolls. Finally, there are important social and psychological aspects of being unemployed which are not considered in the article.

The first section summarizes the general features of the unemployment compensation system, emphasizing the provisions of the state of Minnesota. The second section examines the magnitude of unemployment benefits from an aggregate point of view, and the third section examines the unemployment compensation system from the point of view of an individual who has been laid off.

The Nature of the System

The U.S. unemployment compensation system, as it was enacted in 1935, provided that each state would set up and administer its own system within broad guidelines established by the federal government. The general idea was that workers would receive about one-half their normal full-time weekly wage when unemployed.²

This goal has been supported over the years by Presidents from both parties and was enunciated most recently by former President Nixon in a message to Congress:

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¹U.S. Congress, EMPLOYMENT ACT OF 1946, Title 15, sec. 1021, February 20, 1946, 60 Stat. 23.

I suggest that the maximum benefit ceiling in each state be raised to at least two-thirds of the average wage of that state’s covered workers. The goal is to provide at least four-fifths of the nation’s insured work force half-pay or better when unemployed.\(^3\)

The unemployment compensation system is financed by a tax on employers. In Minnesota the tax rates range from one-tenth of 1 percent to 5 percent, depending on the firm’s experience rating (the ratio of benefits paid by the employer to the employer’s total payroll) and the amount in the state’s unemployment compensation fund. This fund is administered as a trust by the U.S. Treasury, so unemployment compensation payments show up as federal expenditures even though the funds are generated and spent in the individual states. State administrative costs for this program are financed by federal grants. In 1972 employers accounting for 92 percent of all wage and salary employment (82 percent of total civilian employment) were covered.\(^4\)

In Minnesota\(^5\) the weekly benefit during a benefit year depends on the wage rate in the previous year; the length of time over which these benefits are paid depends on the number of weeks worked in the previous year. In that state, an individual must have worked a minimum of 18 weeks (out of the last 52) in a covered occupation and have earned at least $540 to qualify for unemployment benefits.

Once this minimum qualification is met, the weekly benefit is 50 percent of the average weekly wage but not less than $15 or more than $85. The maximum amount payable in a benefit year is the lesser of 26 times the weekly benefit amount or 70 percent of the number of weeks worked (to the nearest whole week) times the weekly benefit amount. In other words, the minimum number of weekly payments is 13 (70 percent of 18), and the maximum is 26.

The minimum amount of earnings necessary to qualify for the maximum weekly benefit is $3,042 ($169 per week over a period of any 18 weeks out of the last 52). This qualifies the worker for weekly payments of $85 for 13 weeks. An individual qualifies for 26 weeks of payments at $85 per week by having worked 37 weeks. Minnesota’s maximum of $85 is about 56 percent of the 1972 state average weekly wage in covered employment, somewhat below the previously mentioned goal of two-thirds.\(^6\)

Some of the most recent changes in Minnesota provisions have been to make the initial waiting week compensable for an individual who has received benefits for at least four consecutive weeks and is reemployed full time, to extend coverage of the program to state, county, and local government workers, and to extend coverage to agricultural employers of four or more workers in 20 weeks of either the current or preceding calendar year.

The Aggregate View
One way to examine the magnitude of the unemployment compensation system is to view unemployment compensation payments as non-discretionary fiscal policy. Under this policy, transfer payments are increased when national income falls and are decreased when national income rises; this is commonly referred to as an

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Five small states have essentially achieved this goal, and three others have achieved it for workers receiving dependent’s allowances. Minnesota has no provision for dependent’s allowances, but 11 states containing 33 percent of the insured unemployment currently have such provisions. Martin Feldstein, "Unemployment Compensation: Adverse Incentives and Distributional Anomalies," NATIONAL TAX JOURNAL, Vol. XXVII, No. 2, June 1974, p. 234.

\(^7\)Hickey, pp. 39-45.
How can unemployment be reduced?

Martin Feldstein, Professor of Economics at Harvard University, has pinpointed several problem areas and suggested some possible solutions to certain structural unemployment problems.

One of the biggest U.S. unemployment problems is the teenage unemployment rate which is about three times the overall average rate. In Britain, as a point of comparison, it is only 50 percent higher than the overall average. A reason for this discrepancy might be the more extensive British use of apprenticeship and trainee programs which would reduce job turnover.

Feldstein argues that the U.S. minimum wage law contributes to the high unemployment rate by preventing teenagers from "buying" the on-the-job training (OJT) they need. Many could not subsist on wages they would receive with OJT, so Feldstein recommends a "Youth Employment Scholarship" to finance this vocational training and an "Employee Investment Tax Credit" with rates tied to the firm's turnover rates.

The teenage unemployment rate, unlike that of the adult rate, does not go up or down in reaction to the fluctuations of business cycles. As a result, the effect aggregate policies can have on the overall unemployment rate is limited.

In dealing with adult unemployment, Feldstein recognizes that some are considered unemployable because of physical, intellectual, or psychological reasons, but focuses on those problem areas which contribute to the level of unemployment and which can be related to the unemployment compensation system.

First, a significant portion of U.S. industries are organized so as to have regular seasonal layoffs. In these industries, unemployment compensation effectively spreads wage payments over the year rather than over the limited number of weeks actually worked. This in itself is not a problem, but since unemployment benefits assure the qualified worker of a minimum income for the year, the wage rates in such industries are probably lower than they would be in the absence of a reorganization of the production process.

Cyclical as well as seasonal variations in demand cause unusually high volatility in U.S. unemployment (vis-a-vis European countries). Feldstein estimates that a 1 percent change in industrial production has about twice the impact here as in the United Kingdom. This may, he says, reflect specific differences such as in seniority structure and unemployment insurance or more general differences in industrial structure, market competition, and national attitudes toward employer/employee relations.

Still another problem area is the group of workers who have a relatively weak attachment to the labor force. Such workers often hold "dead end" jobs (those characterized as having low pay and, perhaps more importantly, no future). Workers commonly leave these jobs voluntarily and so do not qualify for and are little influenced by the unemployment compensation system.

However, they are indirectly affected because wages in their occupations may be influenced by the unemployment compensation system. For, as clearly stated by Bennett Harrison, Associate Professor of Economics and Urban Studies at the Massachusetts Institute of Technology:

All income transfer systems which have the effect of enabling some workers to survive at low wages indirectly subsidize secondary employers, thereby reinforcing (institutionalizing) the existence of the secondary labor market.

The main reforms Feldstein advocates are the elimination of minimum and maximum tax rates on employers, which could minimize seasonal and cyclical fluctuations, and the taxation of unemployment compensation as ordinary income, to provide incentive for reducing the duration of unemployment.

"automatic stabilizer." A criterion that might be used to gauge the adequacy of these transfer payments is to measure them relative to the wages lost by the unemployed.

We know the benefits paid, but there are no regularly reported data on income lost by the unemployed. Under certain assumptions, though, existing data permit the calculation of a "wage replacement ratio" (WRR) which approximates the degree to which earnings are replaced by unemployment benefits.⁸

Suppose total covered unemployed persons (U) receive an average wage (W) and total covered employed persons (E) receive an average wage (W). Then

\[
\frac{\text{Lost wages}}{\text{Total wages}} = \frac{U \cdot \bar{W}}{E \cdot W}
\]

If \(\bar{W} = W\) (that is, if the unemployed and the employed receive the same average wage⁹), then

\[
\text{Lost wages} = UR \cdot \text{Total wages}
\]

where \(UR = \frac{U}{E}\) (the definition of the insured unemployment rate). The wage replacement ratio may therefore be defined as

\[
\text{WRR} = \frac{\text{Benefits}}{\text{Lost wages}} = \frac{\text{Benefits}}{UR \cdot \text{Total wages}}
\]

or further,

\[
\text{WRR} = \frac{(\text{Benefits}/\text{Total wages})/UR}
\]

If unemployment benefits are 1 percent of total wages in covered employment and the insured unemployment rate is 4 percent, then the WRR is .25. In effect, 4 percent of the workers receive 1 percent of the wages, or on average, an unemployed worker receives 25 percent of the wages he or she would have earned.

Between 1960 and 1972, the WRR has ranged only between .28 and .30, indicating that benefits have generally improved in step with wages.¹⁰

Care must be taken in making inference about any individual element of an aggregate, however. As a "per week" type of measure, the WRR includes the usually not compensable waiting week of claimants as well as claimants who have exhausted their benefits. It makes no allowance for the number or duration of spells of unemployment an individual experiences and does not deal with the fringe benefit component of compensation.

The wage replacement ratio may be a fair measure of how transfer payments replace wages lost in covered industries. However, it is of little use in analyzing the impact of the unemployment compensation system on the structure of unemployment or the level of the unemployment rate. At issue here is not only how the level of unemployment compensation benefits affect relative wages but also how they affect the individual worker.

The Individual View

Martin Feldstein of Harvard University has recently published some interesting ideas about the nature of unemployment in the United States. He describes the economic situation of the labor market not as "hard core" unemployment, referring to a certain number of workers being unable to find jobs, but as a high turnover type of unemployment. That is, most workers can, after being out of work for a relatively short time, find jobs in their former occupations. The problem is that these jobs are not attractive, and many unemployed persons are passing them up in hopes of finding more

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⁹This might be difficult to accept since many believe that it is the low wage workers who get laid off. Data indicate that though claimants in a given industry tend to have lower average weekly earnings than the average of all workers in the industry, more claimants come from the high wage industries. At least for the years 1970, 1971, and 1972, the assumption that \(\bar{W} = W\) seems quite reasonable. Papier, p. 385.

¹⁰Similar constancy is shown by the ratio of average weekly benefits to average weekly wages in covered employment—evidence that state governments have been rather faithful in legislating benefit increases consistent with wage increases. Edgell and Wandner, Table 2, p. 35.
desirable jobs—perhaps with better advancement opportunities. He goes on to say:

For such individuals, job attachment is weak, quitting is common, and periods without work or active job seeking are frequent. The major problem to be dealt with is not a chronic aggregate shortage of jobs but the instability of individual employment. Decreasing the overall rate of unemployment requires not merely more jobs, but new incentives to encourage those who are out of work to seek employment more actively, and those who are employed to remain at work.¹¹

In order to examine the influences and effects of the unemployment system as well as unemployment compensation benefits on the individual worker, a closer look must be taken at the following specific areas: some characteristics of the structure of unemployment; the impact of unemployment compensation benefits on the individual worker’s income (a fundamental factor of which is the high rate of taxation which forces a sizable wedge between nominal wages and take-home pay); and the effects of the unemployment compensation system on the occupational structure and relative wages. Of further importance is how the individual’s incentive to work is affected by each of these areas.

The structural characteristics of the unemployed in the United States support Feldstein’s view of the labor market. The duration of unemployment tends to be rather short. In 1971, when the unemployment rate was 5.9 percent, the mean duration of unemployment was 11.4 weeks—nearly half the unemployed were out of work for less than 5 weeks and only about 10 percent for 27 weeks or more. In addition, job losses in the 1970s account for less than half of total unemployment with the majority of the unemployed being new entrants and reentrants to the labor force or those who have left their jobs voluntarily.

In addition to these facts about unemployment, Feldstein offers interesting evidence that unemployment compensation itself is a significant incentive to remain unemployed. For example, mean durations appear to be longer in states with more ample unemployment benefits, and some union contracts now have "inverse seniority" provisions whereby senior employees can choose to be laid off before newer employees.

How is an individual's income affected by unemployment? Aggregate data indicate that about 30 percent of lost wages are replaced by unemployment benefits; but when benefits are measured against marginal after-tax income, a very different picture of the impact of unemployment on disposable income emerges. In fact, in several states it is possible for some persons to have a higher after-tax income by being unemployed than by working.13

As long as there are benefit weeks remaining, an individual must choose between remaining unemployed one more week (if a job is available) or working and paying an effective tax rate in excess of 100 percent. For many, as much as 70 percent of the after-tax marginal

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### Tax Rates, Net Income, and Unemployment Benefits*

**By Income Level for a Single Person and the Working Member of a Family of Four**

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>Single Person</th>
<th>Weekly Net Income</th>
<th>Weekly Unemployment Compensation</th>
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<tr>
<td></td>
<td>AVERAGE</td>
<td>MARGINAL</td>
<td>AVERAGE</td>
</tr>
<tr>
<td>$4,000</td>
<td>14% 29.3%</td>
<td>$66 $54</td>
<td>$38 58% 71%</td>
</tr>
<tr>
<td>$6,000</td>
<td>19 30.3%</td>
<td>94 80</td>
<td>58 62 72</td>
</tr>
<tr>
<td>$8,000</td>
<td>22 35.0%</td>
<td>120 100</td>
<td>77 64 77</td>
</tr>
<tr>
<td>$12,000</td>
<td>26 38.7%</td>
<td>171 141</td>
<td>85 50 60</td>
</tr>
<tr>
<td>$16,000</td>
<td>28 36.3%</td>
<td>221 196</td>
<td>85 38 43</td>
</tr>
<tr>
<td>$20,000</td>
<td>30 40.7%</td>
<td>268 228</td>
<td>85 32 37</td>
</tr>
<tr>
<td>$24,000</td>
<td>32 44.1%</td>
<td>312 258</td>
<td>85 27 33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual Income</th>
<th>Family Member</th>
<th>Weekly Net Income</th>
<th>Weekly Unemployment Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AVERAGE</td>
<td>MARGINAL</td>
<td>AVERAGE</td>
</tr>
<tr>
<td>$4,000</td>
<td>5% 12.5%</td>
<td>$73 $67</td>
<td>$38 52% 57%</td>
</tr>
<tr>
<td>$6,000</td>
<td>11 27.8%</td>
<td>102 83</td>
<td>58 57 70</td>
</tr>
<tr>
<td>$8,000</td>
<td>16 31.4%</td>
<td>129 106</td>
<td>77 60 73</td>
</tr>
<tr>
<td>$12,000</td>
<td>21 35.2%</td>
<td>182 149</td>
<td>85 47 57</td>
</tr>
<tr>
<td>$16,000</td>
<td>24 32.9%</td>
<td>234 206</td>
<td>85 36 41</td>
</tr>
<tr>
<td>$20,000</td>
<td>26 35.5%</td>
<td>284 248</td>
<td>85 30 34</td>
</tr>
<tr>
<td>$24,000</td>
<td>28 38.1%</td>
<td>332 286</td>
<td>85 26 30</td>
</tr>
</tbody>
</table>

*The data in this table apply only to the last week of the year and thus should be interpreted cautiously. Taxes are based on the income earned during the entire year while unemployment benefits are determined by the rate at which income is earned during the weeks of actual unemployment.

**All taxes and tax rates are computed from the 1973 federal and Minnesota tables, assuming standard deductions. The OASI base used is $13,200 (the 1974 base), and the rate is 5.85 percent.

Source: FRB Minneapolis
income is replaced by tax exempt unemployment benefits—quite a bit more than the 30 percent estimated in the aggregate analysis.

The accompanying table shows selected Minnesota income, tax, and unemployment benefit data for two representative types of taxpayers—a single person and a family of four with only one member working. Except for the very low income family, unemployment benefits replace about 70 to 80 percent of marginal after-tax income for income levels up to about $8,000. At $12,000 this replacement drops to about 60 percent because the maximum benefit becomes an effective constraint. Above $13,200 the share of the marginal net wage replaced by unemployment benefits also gets smaller because the Old Age and Survivor’s Insurance (OASI) tax is dropped from the marginal tax rate.

Since Minnesota has no dependent’s allowances, the single person with a lower after-tax income receives a relatively higher unemployment benefit than the married worker; or since the difference between what is taken home from a job and what is lost when giving up unemployment benefits is smaller, the single person has more incentive to remain unemployed an additional week.

A facet of the unemployment compensation system is thus incentives, involving the effort that an unemployed person will make in searching for another job, the wage which a worker is willing to accept at another job, and the particular occupation which will be chosen.

At the same time as it affects the individual worker, the unemployment compensation system may have a significant effect on the occupational structure and relative wage rates in the United States. Consider a married individual, with a spouse not employed outside the home and two children, who has the following...
covered job choices (see chart): Job A pays $3.85 per hour but is seasonal and provides work only 26 weeks of the year for an annual earned income of $4,000 before taxes. Job B pays $2.88 per hour for a steady 52 weeks so that annual earned income before taxes is $6,000. Under Minnesota unemployment provisions, the person who chooses B rather than A would work 26 more weeks for an extra after-tax income of only $132. If the example is changed so that job A pays $5.77 per hour ($6,000 per year before taxes) and job B pays $3.85 per hour ($8,000 per year before taxes), then the person who chooses B over A works 26 more weeks for $123 less after tax income.14

The importance of incentive effects depends on the number of people receiving unemployment benefits in relation to the total number of unemployed. Since World War II the ratio of covered unemployment (under all programs) to total unemployment has ranged from 39 to 77 percent. In 1971 about 75 percent of all the unemployed over age 24 were insured.15 Moreover, as the total unemployment rate rises, covered unemployment tends to be a larger share of total unemployment.16

From the first half of 1973 to the first half of 1974, the level of unemployment (unadjusted) increased from 4.5 to 4.8 million (six month averages). At the same time, the share of total unemployment which was covered increased from 43 to 53 percent. This large jump in share came about because of the increase in the level of covered unemployment of about 600 thousand workers compared to the decrease in the level of uncovered unemployment of about 300 thousand.

In addition to cash payments, there are other factors which affect the welfare of a person receiving unemployment benefits. In Minnesota, for example, an individual can earn up to $25 per week before losing any part of unemployment benefits. Data indicating the extent to which this provision is used by the recipients of unemployment benefits are not available, but it has potential to significantly increase the weekly income of some unemployed persons.

The food stamp program may also lighten the burden of the unemployed. Families with certain asset and income criteria qualify for a food stamp bonus equal to the difference between the value of the food stamps received and their cost to the recipient. In the fall of 1974, a family of four which met the asset constraint qualified for the food stamp program if its net monthly income including unemployment benefits was at most $500. On income grounds alone, the family of four in the table would qualify for a food stamp bonus of about $11 per week at the $85 unemployment benefit level and about $25 per week at the $38 level.

14 In both cases workers in job A would qualify for 18 weeks of benefits with an average weekly benefit of $77 in the first case and $85 in the second.


16 For a detailed analysis of the hypothesis that the ratio of covered unemployment to total unemployment is proportional to the total unemployment rate, see the appendix.
Who benefits most from unemployment compensation, and why?

The unemployment compensation system might be viewed as a mechanism for redistributing income in the United States so that low income families receive more in transfer payments than high income families. But it doesn’t work that way. Martin Feldstein has found that the distribution of U.S. unemployment benefits by family income class is now about the same as the distribution of total income; the unemployment compensation system does not alter the distribution of family income.

The accompanying chart is quite surprising. Many are used to thinking of the unemployed as mostly poor individuals who would obviously suffer from being unemployed. Why should they get such a small share of total unemployment benefits while unemployed workers with normally higher incomes receive a much greater share? A closer look may lessen the surprise.

The poor are often ineligible for unemployment benefits when they are unemployed because they worked in uncovered occupations, didn’t hold their jobs long enough, or quit their jobs. If they are eligible and collect unemployment compensation, they are less likely to find new jobs before their benefits are used up.

Unemployed middle and upper middle income persons are more likely to collect unemployment compensation—for the opposite reasons. They worked in covered occupations and earned enough to collect a higher benefit for the maximum length of time. Many may simply be laid off and are soon called back to the same job. In addition, middle and upper middle income families are more apt to have two wage earners and so are more open to the possibility of becoming unemployed.


So, persons receiving unemployment compensation may also benefit from this program (though again, the number who do is not available).

Summary and Conclusions

Of the points raised in this review, the tax exemption of unemployment benefits seems most obviously in need of reconsideration. Tax exempt status was granted to unemployment benefits in 1938 when the unemployment rate was 19 percent, when the tax structure was such that only 4 percent of the total population had taxable income, and when the median income tax rate was only 4 percent. Today’s high tax rates create serious horizontal inequities between income earned and income received in unemployment benefits. An equivalent, and perhaps preferable, solution would be to substantially lower tax rates for low wage workers.

The proper level of unemployment benefits cannot be determined by analysis of the sort...
presented here and can ultimately be determined only by a value judgment. However, this evidence implies that unemployment benefits are large enough to have a significant effect on the work choices of employees. They may seem low in an absolute sense but not when measured against marginal take-home pay.

If society is concerned that the level of unemployment benefits is too low, perhaps it would do better to adopt policies which would increase the income of the employed rather than raise the benefit levels of the unemployed. Insured workers now receive benefits of about 50 percent of average gross weekly earnings—any higher and many could have as much income after taxes whether they work or not.

For the policy maker, the current level of unemployment benefits must be viewed as having an effect on the trade-off between inflation and unemployment, since when laid off, a worker's entire product is lost to society. However, the resulting fall in demand is not affected to the same extent as is the fall in supply because the worker's disposable income falls by a relatively small amount. When unemployment rates are relatively high, the probability is also high that a worker who is displaced by macro policies is covered by the unemployment compensation system. Thus the burden of individuals who in effect are paying the short-run social cost of obtaining lower rates of inflation by being laid off is eased.

### Appendix

The hypothesis that the ratio of covered unemployment to total unemployment is proportional to the total unemployment rate produces this estimated equation for 1947 through 1973:

\[
cu = 13.17 + 1.27 u - 1.44 \ln f \quad \hat{R}^2 = .87
\]

\[
(5.8) \quad (13.1) \quad (-6.1)
\]

and this for 1954 through 1973:

\[
cu = 9.75 + 1.49 u - 1.29 \ln f \quad \hat{R}^2 = .93
\]

\[
(4.8) \quad (16.3) \quad (-6.8)
\]

where \(cu\) is the logarithm of covered (all programs) unemployment, \(u\) is the logarithm of total unemployment, and \(f\) is the logarithm of the civilian labor force.*

These equations support the view that as the level of unemployment rises, a larger share is covered. And the higher is the share of covered employment, the larger is the incremental change in covered unemployment for a given change in total employment.

For example, if covered unemployment is 50 percent of total unemployment, the second equation indicates that if the level of unemployment increases by 100 workers, about 75 will be covered by unemployment benefits; and if 60 percent of the unemployed are covered, about 90 out of the 100 marginal increase in unemployed workers will be covered. It might be argued that the 1.49 elasticity in the second equation is not a very sophisticated estimate and may be much too high; however, the data for the first half of 1974 do not support this view.

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*Data are annual observations, and numbers in parentheses are "t" statistics. Including a trend term in the regression left the \(u\) elasticity essentially unchanged, but all other terms became insignificant, and \(\hat{R}^2\) increased by only .01.