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# A Dispersed or Concentrated Agriculture?

## —The Role of Public Policy

By C. Edward Harshbarger and Sheldon W. Stahl

Farmers and policymakers alike are expressing concern over the possible future direction of American agriculture. Prompting these concerns are the rapid changes that have occurred in production and marketing patterns as a result of technological improvements and certain institutional factors. In short, agriculture has evolved to the point where fewer, but larger, farms are producing most of the output and realizing the largest share of income. Moreover, many agribusiness firms are exerting pressure to more closely coordinate various production and marketing activities through contractual arrangements with producers. In fact, several commodities such as broilers, eggs, and most fruits and vegetables are presently handled in this fashion rather than through an open, competitive market.

In an earlier article, the agricultural sector of the economy was examined to determine the extent to which economic concentration has occurred in the production and marketing of farm commodities.<sup>1</sup> Although the evidence

in that article showed that production is clearly becoming more concentrated in the hands of large producers, the fact remains that economic power in agriculture is relatively diffused as compared with many industrial sectors of the economy. Furthermore, despite well publicized developments regarding contractual arrangements for a few commodities, more than three-fourths of total farm output continues to move through an open market of many buyers and sellers. While significant changes in marketing practices may occur for individual commodities, it is generally expected that the bulk of farm marketings will be exchanged in open markets in the foreseeable future.

Nevertheless, a crucial issue for farmers, agribusinessmen, and consumers is the organization and control of agriculture in the future. In a dispersed system consisting of many proprietary units, control would rest in the hands of many individual decisionmakers; at the opposite extreme, control would be concentrated in a relatively small number of very large firms, greatly reducing the high degree of individual freedom afforded by a dispersed system.

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<sup>1</sup>/C. Edward Harshbarger and Sheldon W. Stahl, "Economic Concentration in Agriculture—Trends and Developments," Federal Reserve Bank of Kansas City, *Monthly Review*, April 1974.

## A Dispersed or Concentrated Agriculture?

The family farm-open market system that is so prevalent in agriculture today is a reflection of the stance taken by public policymakers since the early days of the United States. Shortly after the nation was founded, it was decided that the public interest would best be served by encouraging wide distribution of land ownership. Thus, laws were passed that facilitated the sale and homesteading of public land into family-sized units. Similarly, the open, competitive market is a derivative of the free enterprise system that has been espoused in this nation for so many years. Reflecting the cherished concepts of freedom and equal opportunity, early policymakers established various rules and regulations that heavily influenced the development of free markets in which each individual could compete to earn his just reward. Obviously, political philosophies and social goals have changed as the economy has evolved from an agrarian to a highly complex industrial structure. But the markets for agricultural products, some of which remain open while others are administered, still mirror the laws, customs, and institutions that have been supported by public policy. Hence, just as public policy has contributed to current agricultural production and marketing practices, so too will policy influence the future direction and control of American agriculture.

### **CONTROL AND THE PRESSURES FOR CHANGE**

Unless significant changes in public policy occur, the forces affecting agricultural production and marketing trends are not likely to subside in the near future. Thus, farm numbers will continue to decline, production will become more concentrated, and further progress likely will be made in coordinating production and marketing activities through contractual arrangements. On the other hand, public policy can be a tool with which to counteract or redirect structural developments in agriculture. Before this can occur, however, a general under-

standing of the factors which have contributed to structural change in agriculture is required.

### **Market Developments and Pricing**

Among those factors which have contributed to the shift from a dispersed agriculture to a more concentrated structure are the increased technical complexity of farming and the pressures to expand output to achieve lower unit costs. Technological developments have made it possible for farmers to improve production efficiency, but the sharp increase in the managerial skills required of farm decision-makers has made it more difficult to operate successfully in a competitive agricultural environment. Moreover, in recent years, the capital requirements associated with the adoption of new technology have soared, and unfortunately, many farmers could not afford the investment. While the staying power of smaller, less technologically advanced, farmers is surprisingly strong, the price-cost squeeze has forced many to seek new jobs, retire, or live on very low incomes.

The increased complexity in agricultural production and the attendant risks and financial requirements have led to greater specialization. Farmers frequently focus on one or two principal commodities in order to exploit the economies of volume production. Moreover, in those areas where they feel deficient, farmers increasingly are turning to outside specialists for the technical knowledge and financing required to operate efficiently. Sometimes it is even necessary to enter into formal contracts to secure the desired services, and when this happens, control often shifts from the farmer to the outside interests.

With few exceptions, however, most of these developments represent adjustments that would normally occur in a free, competitive market whenever new technology is introduced. As such, the role of public policy in this case should be to permit the forces in motion to operate

freely unless other problems become apparent and are accorded higher priority.

The manner in which farm markets function must also be examined to explain the current structure of agriculture. The competitive market, as a socio-economic institution, has several inherent features that are desirable from a public policy standpoint. Offering an environment in which no single participant can affect price, the market brings together the disparate decisions of buyers, sellers, producers, and consumers to establish equitable market values on goods and services. In addition to guiding and directing production and consumption decisions, a competitive market affords a wide range of individual freedom in that it provides meaningful choices among alternatives and effectively limits barriers to entry or exit.

The performance of a pricing system in a competitive market can be evaluated in terms of how well it satisfies certain specified criteria. As far as agriculture is concerned, an effective pricing system is expected to facilitate the physical marketing of the commodity, yield acceptable returns to market participants, maintain reasonably stable prices, protect long-run demand by not pricing the product out of the market, assure equitable treatment of all participants, and clear the market.<sup>2</sup>

Most of the problems with pricing systems in agriculture revolve around the first three criteria. Probably the most important factor behind the decline of traditional open markets has been the growing inefficiency in physically moving and exchanging commodities. Direct selling, either through individual negotiation or formula pricing, as well as vertical integration have provided much greater efficiencies in assembling and handling several farm commodities. Consequently, the open market is often skirted altogether, coming into play only as a base for

determining the "going price" in the negotiations. Obviously, if the central market slips in volume of sales, a question immediately arises about the validity of the reported base price as a signal of general market conditions for the industry as a whole. Where this problem has occurred, participants in the exchange must often depend upon their own abilities to acquire and translate general market news into a price.

Farmer dissatisfaction with open market results, perceived as not yielding equitable returns to market participants, represents another threat to the structural organization of agriculture. History provides several examples of farmers seeking out alternative pricing systems to gain better treatment. Owing to unstable prices, chaotic conditions, and inefficient handling, farm legislation established Federal marketing orders for fluid milk during the 1930's to instill greater stability and order in the industry. Virtually all of the selling is now done directly to the processor under a tight set of specifications. Consequently, milk prices are some of the most stable in agriculture today, thus satisfying the third criterion for successful performance of a pricing system; however, the markets do require close supervision under this arrangement.

In essence, the existence of marketing orders, formula pricing techniques, and vertical integration reflect not only the special characteristics of the commodities involved but also certain shortcomings of the market as viewed by the participants.<sup>3</sup> While these alternative pricing systems have produced positive benefits for certain farmers, the results in other areas have been disappointing. For example, vertical integration in the broiler industry has transformed most producers into piece-wage workers and, at the same time, has virtually eliminated the market. In fact, quotations on farm prices for broilers no longer exist. Although consumers and some producers stand to benefit

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2/V. James Rhodes, "Pricing Systems—Old, New, and Options for the Future," *Bargaining in Agriculture*, North Central Regional Extension Publication 30, University of Missouri Extension Division, C 911, June 1971. p. 12.

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3/The characteristics of commodities typically produced under contract or by vertically integrated industries were discussed by the authors in the article cited in footnote 1.

from greater price stability and more efficient production, certain costs as measured by the constraints placed on farmers in making production decisions and controlling marketings must be taken into consideration before a final judgment is made on a new marketing arrangement. Public policy can play an integral role in cultivating the changes that are needed in the future while correcting for errors made in the past.

### **Institutional Factors**

Previous research suggests that the increase in economic concentration in agriculture has also been influenced by several institutional factors. Government farm programs, for example, have probably given an unintended boost to larger farms even though various direct actions have been taken to support the smaller family units. According to one report, several important reasons for believing that price and income programs speed the trend to concentrated holdings **are** (1) wealthy investors, either farm or off-farm, presumably are highly responsive to protected income, (2) the stability of income promised by programs may provide improved access to big capital markets, and (3) small farmers probably have more difficulty accumulating capital for expansion even with commodity support programs.<sup>4</sup> Although it is difficult to specify the extent to which government programs have contributed to economic concentration in agriculture, the overall impact has been to help finance growth to larger operations that might not have occurred otherwise.

Income tax laws have also introduced an institutional bias that has accelerated the trend toward larger farms. According to Professor Levi, three features in the tax laws give preferential advantages to wealthy taxpayers who make investments in agriculture even though

4/L. R. Kyle, W. B. Sundquist, and H. D. Guither, "Who Controls Agriculture Now?—The Trends Underway," *Who Will Control U.S. Agriculture?* North Central Regional Extension Publication 32, University of Illinois Cooperative Extension Service, Special Publication 27, August 1972, p. 11.

the system presumably is progressive in nature.<sup>5</sup> For example, the graduation of income tax rates, the special rates for income from capital gains, and the treatment of depreciation as a "paper loss" all work to the relative advantage of people in high tax brackets because, in essence, a larger proportion of the investment ultimately is subsidized by the Treasury. Meisner and Rhodes recently examined the changing structure of the cattle feeding industry, giving special attention to the rapid influx of outside investors who have found cattle feeding to be an attractive tax shelter.<sup>6</sup> For this reason and others, cattle feeding in large commercial lots expanded sharply during the 1960's. Moreover, as outside investment funds continued to roll in during the early 1970's, the industry expanded further even though the returns, without tax considerations, may not have warranted it. Certainly, part of the crisis now confronting the cattle feeding industry—not to mention its concentrated structure—is traceable to the response of outside investors to attractive concessions in the tax laws.

Aside from the obvious loss of revenue to the Treasury, tax-subsidized investments in agriculture have several other effects, not all of which are desirable. It is widely accepted that tax concessions tend to bring more risk capital into farming, especially for large scale enterprises such as cattle feeding, poultry, and orchards. They also have the effect of expanding production, thus lowering farm prices and incomes in most cases. Furthermore, because the concessions make it possible for the tax-subsidized investor to make money even though the enterprise itself shows no profit, ownership and control are frequently shifted out of the hands of farmers who may find it difficult, if not

5/Donald R. Levi, "Federal Income Tax Law—A Powerful Policy Tool," *Economic and Marketing Information for Missouri Agriculture*, Department of Agricultural Economics, University of Missouri-Columbia, Vol. 19, No. 7, (July 1971).

6/J. C. Meisner and V. James Rhodes, "The Changing Structure of U.S. Cattle Feeding," Department of Agricultural Economics, University of Missouri-Columbia, Special Report 167, November 1974.

impossible, to compete under these conditions. Clearly, the tax rules do affect structural developments in agriculture and the ability to compete for resource ownership. Preserving a dispersed agriculture will likely require, among other things, a fundamental reappraisal of the tax system by policymakers with a view toward reform in certain areas.

### **Maintaining Control**

Assuming that managerial skills are not a limiting factor, the key to whether agriculture remains dispersed or becomes more concentrated is control. If control is to rest in the hands of the traditional farmer, certain conditions regarding access to markets and to important resources, such as land, technical knowledge, and credit, must prevail.

With respect to farmland, various policies in the past have been designed to augment a wide distribution of ownership. However, the competing demands for farmland for urbanization and recreational purposes, coupled with new laws on zoning, conservation, and pollution controls, threaten to restrict this privilege. Furthermore, the upward trend in land prices has markedly reduced the opportunities for many young farmers to purchase farm real estate despite credit policies that have generally favored farm ownership.

Access to knowledge, whether technical or market related, is another factor which can affect the structure of agriculture. Even the so-called "free" market depends on effective government regulation and information to make it workable. Each year millions of dollars are spent by public and private institutions to provide market participants with information on production estimates, expected disappearance, and the latest price developments in domestic and international markets. Competitive marketing systems cannot function effectively without good information.

Equal access to research findings from scientific experiments by public-supported insti-

tutions, such as land grant universities, has enabled many family farm units to remain technologically efficient and competitive. Any restrictions on access to this knowledge will give a special advantage to those who acquire it first. Thus, a policy to confine research mainly to private firms would likely lead to greater concentration in agriculture, especially if the research happened to focus on product development and promotion in vertically integrated industries.

In the last few years, one of the chief concerns in agriculture has been the sharp increase in capital requirements as land values and the amount paid out for purchased inputs have skyrocketed. Because of these developments, the risks in farming are such that, if prices received drop even modestly below costs, severe financial stress can result unless precautionary measures are taken. Sometimes these risks can be shifted to others through the use of futures markets or crop insurance. Price support programs and tax shelters also offer protection. However, some producers are finding it necessary to form contractual arrangements with processors to reduce risks, which frequently results in some loss of managerial control.

Similar problems exist with credit. Any policy that makes credit more available or less expensive to certain groups will affect the future structure and control of agriculture. The traditional sources of credit, while they have been sufficient to date, could encounter problems which may make it more difficult to finance agriculture at competitive rates. Many farmers have already boosted their borrowings to levels that seem precarious, given the high risks noted earlier. Hence, a future problem may be finding ways to increase equity capital to solidify a farmer's financial position. If increases in farm income prove inadequate, outside sources of equity capital will probably take on greater importance. There are several ways to acquire outside capital, including the sale of common or preferred stock if the farm is incorporated,

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but virtually all of the methods entail some loss of control. However, if these measures fall short, a higher incidence of direct ties between producers and vertically integrated organizations in order to secure funds for agriculture can probably be expected, in which case much of the control likely would shift out of the farmers' hands. Obviously, public policy may face a formidable challenge in the future in assuring that the growing credit needs of individual farmers are met within reason.

The shift in emphasis from marketing commodities to merchandising food through product development and promotion by processors and retailers suggests that several farm production units will or could be absorbed into large corporate enterprises, resulting in a more concentrated agriculture. Thus, maintaining access to markets is essential to a dispersed proprietary farming system.

Two different approaches can be used to keep marketing options open. In short, farmers may try to preserve access, as individuals, to an open market system, or they may seek to protect market access by grouping together.<sup>7</sup> In the group approach, certain individual prerogatives would probably be relinquished, but for some commodities, individual access may not always be attainable.

Many farmers are examining group action because they are becoming increasingly concerned about the fairness of price-making forces in deteriorating open markets and because they feel at a disadvantage in individual negotiation. While there are various ways in which group action can occur, most of the attention has focused either on vertical integration through farmer cooperatives or on horizontal bargaining associations.

A common misconception is that the primary reason for group bargaining is to raise prices above their free market level. While this

objective exists, farmers may actually use bargaining just to discover a fair and stable price thought to be absent in the present pricing system.

Much of the impetus behind the cooperative movement has emanated from the Capper-Volstead Act of 1922 which explicitly allowed farmers to form cooperative associations without fear of violating the antitrust laws. But in no sense does Capper-Volstead permit farm cooperatives to do things that are otherwise illegal, such as monopolizing or restraining trade enough to unduly influence prices. Reflecting this call for surveillance, the Justice Department has recently filed civil antitrust suits against a few very large regional dairy cooperatives, charging them with illegal practices. Thus, there are limits to the power that cooperatives can exercise in behalf of their membership.

Public policy clearly encourages the cooperative concept as a means of equalizing the bargaining power of the individuals belonging to the cooperative and the large firms with which they must do business. As such, co-ops have become quite important as a means of preserving the producer's access to commodity and input markets. Furthermore, farmers are able to gain some of the benefits of industrial organization without being enveloped into a big corporate structure.

The bargaining association differs from the cooperative in that it serves as the producers' representative in contractual negotiations over prices and other terms of trade. In some cases, however, a cooperative may not only integrate forward but also serve as the bargaining agent for its members. At any rate, the greatest gains from bargaining thus far in the United States have been mainly in fluid milk and processing fruits and vegetables—both of which involve cooperative bargaining in the establishment of government marketing orders.

In essence, the overall strategy is for farmers to turn to group action as a replacement for the

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<sup>7</sup>/Rhodes, "Policies Affecting Access to Markets," *Who Will Control U.S. Agriculture?*, p. 39.

open market. Producers would likely forego some of their individual freedoms for the privilege of gaining greater security and less risk through their cooperatives or bargaining associations. However, some hazards are involved. For example, when a cooperative becomes large enough to compete with strong corporate interests, will it remain responsive to its membership, or has it moved beyond the farmers' ability to control it?<sup>8</sup> Clearly, when a cooperative becomes the only viable access to a market, the policy implications are far different than when it represents just another choice in an open market of many competing firms. Furthermore, there is evidence that some "corporate" farmers are invading the Capper-Volstead shelter in order to bargain for, or "discuss," higher prices with each other and escape antitrust prosecution. One danger is that if this practice becomes widespread, not only will these corporations lose their privileges but the whole cooperative system could be placed in jeopardy. Moreover, if agriculture becomes concentrated with limited marketing opportunities, public policy would inevitably be forced to consider regulation of pricing practices to protect the consumer.

#### IMPLICATIONS FOR PUBLIC POLICY

From the foregoing discussion, it is apparent that the agricultural sector of the economy is a complex amalgam of many different organizations and ways of doing business. The relatively dispersed system that has survived in agriculture for so long has been supported by various national policies. The dissemination of information, an agricultural credit system, price support programs, and the authority for farmers to group together for bargaining purposes are but a few of the measures sanctioned by public policy. Clearly, organizational structure has historically been a public policy issue, and it will no doubt continue to be.

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<sup>8</sup>/*Ibid.*, p. 40.

From the consumers' standpoint, most of the evidence suggests that under either a dispersed or a concentrated agriculture, adequate food supplies would be available. However, the implications for prices are likely to be quite different under the two systems. With a concentrated agriculture in which a few large, vertically integrated or corporate firms would dominate, monopolistic pricing could easily surface and offset the potential gains to consumers arising from closer market coordination. In this event, policymakers would find it necessary to police the performance of the pricing system very diligently—probably a cumbersome process—to protect the interests of the public.

The defense of the dispersed, competitive market system rests heavily on its socio-economic qualities of freedom and fair play as well as its ability to guide and direct resource use. As noted, obstacles arising from the complexity of many industrial processes, and problems associated with the control of markets in which merchandising techniques are emphasized, pose a serious threat to the dispersal concept. By the same token, it is becoming increasingly clear that the degree of freedom in present farm operations may have to give way to the requirements of market coordination for best meeting the demands of a sophisticated economy. Some sacrifice in individual freedom may be in order for the common good.

Nevertheless, the present structure of agriculture is very competitive with control resting largely in the hands of individual producers. Furthermore, there is still considerable room to move in the direction of greater concentration for the sake of efficiency without losing these desirable features. Certainly, the competitive system—while far from **perfect**—possesses several admirable features that merit the continued loyalty of policymakers. Probably no other system is capable of giving so much positive direction to the economy with so little need for policing the performance.

If there is a danger, it is that control of agri-

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culture may shift out of the hands of individual producers, not because the family farm-open market concept is an anachronism in a complex industrialized economy, but because public policy may not perceive the ultimate impact of the forces in motion until it is too late. For farmers to lose control by default would be most unfortunate, but if the trends now **under-**

way in agriculture continue unchecked, this may happen. In the final analysis, the question about the future direction and control of agriculture can be settled in a number of ways, depending on how public policy views the problem. In all probability, the final decision will hinge more on social and political viewpoints than on economic ones.

# *Interpreting Recent Labor Market Developments*

*By Steven P. Zell*

The national unemployment rate is, without question, the most widely followed indicator of labor market conditions in the United States. At a time, however, when inflation, recession, and unemployment are so much in the news and changing labor market conditions are reported daily, it becomes increasingly necessary to look beyond the total unemployment rate in order to assess the effect of these changes on the economy. This article examines recent U.S. labor market developments with special emphasis on important labor market indicators other than the total unemployment rate and, in particular, on some possible problems involved in their interpretation.

While unemployment developments were essentially stagnant during the first half of 1974, a series of dramatic changes began early in the second half of the year. After remaining at or below the 5.2 per cent level for the first 6 months of 1974, the national unemployment rate rose a significant 0.6 of a percentage point from June to September to a 2% year high of 5.8 per cent in September. This long anticipated climb in the unemployment rate was initiated by small jumps of 0.1 of a point in both July and August. The large September increase of 0.4, of a point confirmed the fact that these small initial changes marked the start of an upward trend in the rate of unemployment.

This unwelcome but expected news was further brought home by unemployment rate increases of 0.2 of a point in October, 0.6 in November, and 0.6 in December to a 16-year high of 7.2 per cent. In each of these months, however, the observed changes reflected somewhat different labor market patterns which were not obvious from the total unemployment rate alone.

## **THIRD QUARTER DEVELOPMENTS**

From June to July, while the civilian labor force increased by almost 250,000 persons, only some 150,000 of these were able to find employment. As a result, the number of unemployed persons increased about 100,000 and the national unemployment rate rose from 5.2 to 5.3 per cent. Of particular interest is that the July increase in the labor force was due solely to increased participation among adult women, 20 years of age and older. In that month, both the number of adult males and the number of teenagers in the labor force actually declined. From January to July, the number of women at work increased 1.2 million while the number of employed men fell 230,000, and the number of employed teenagers dropped 460,000. While female employment and participation has been on an historical **uptrend**, the large increase in female participation of over 450,000 in July and

almost 300,000 in June would appear to indicate an attempt to maintain real family income in the face of high inflation and a weakening primary labor market.'

In August, the total unemployment rate again inched up slightly, rising to 5.4 per cent of the civilian labor force, due mostly to an increase in adult male unemployment. The adult female rate<sup>2</sup> remained constant and the teenage rate declined.' In absolute numbers, there was very little overall change in the labor market.

The first major jump of the year in the unemployment rate took place in September, when the unemployment rate moved up 0.4 of a per cent to 5.8 per cent, the highest level since April 1972. Similarly, the number of unemployed, at 5.3 million, was the highest recorded since this series was first collected for 1947. These numbers represented an increase of 440,000 over August in the number of unemployed and 1.2 million over October 1973, when the unemployment rate was at its recent 4.6 per cent low.

Unlike in July and August, the rate and number of unemployed increased in September in all categories of the population. While the unemployment rate for adult men moved up only from 3.8 to 3.9 per cent, much greater changes were observed for women and teenagers. The female rate, which rose from 5.2 to

5.7 per cent, represented an unemployment increase of about 150,000 persons. The greatest change, however, was found among persons 16-19 years of age. In this population subgroup, unemployment climbed some 236,000, yielding an unemployment rate increase from 15.3 to 16.7 per cent.

Several factors must be considered in interpreting these third quarter labor market developments. While unemployment moved up 440,000 between August and September, total employment also increased 351,000 in the same period. Furthermore, most of the increase in unemployment can be ascribed to lower than normal employment growth among young men, smaller than usual college enrollment, and increased job search among persons who continued to attend school in September. It has been argued, therefore, that the observed unemployment increase in September was not of the same economic significance as it would have been were adult male wage earners the principal factor. In assessing the validity of this conclusion, several points must be taken into consideration. First, the significance of teenage unemployment, in and of itself, is by no means a closed question. While some economists view a high teenage unemployment rate as practically normal, George Perry of the Brookings Institution asks, "'... But what kind of experience with the capitalist system is it for a teen-ager entering the labor force to find that nobody wants to hire him.' Perry believes that the immediate cost of not absorbing teen-agers into the labor force is social disruption, and the long term cost is the creation of another generation of workers with low productivity and chronic unemployment problems."<sup>4</sup>

Furthermore, while employment and the civilian labor force usually increase in September, in recent years the only changes of the September 1974 magnitude (i.e., increases of 800,000 in the civilian labor force and 350,000

4/'Unemployment becomes an explosive issue," *Business Week*, November 9, 1974, pp. 156-57.

1/**Steven P. Zell**, "A Labor Market Primer," *Monthly Review*, Federal Reserve Bank of Kansas City, January 1975, p. 16.

2/*Ibid.* The unemployment rate for a sub-group of the population, such as adult females, is calculated by taking the ratio of the number of unemployed persons in that group to the number of employed plus unemployed persons in that group.

3/**Because** these data are taken from a probability sample rather than from a complete census, seemingly large changes are not always *statistically significant*. A change is termed statistically significant if there is only a very small probability that it would have resulted solely by chance. For relatively small population groups with large unemployment rates, such as Negro teenagers, a change would have to be much larger to be statistically significant than for a large group such as adult males. For an excellent discussion of this subject, see Geoffrey H. Moore, "On the Statistical Significance of Changes in Employment and Unemployment," *How Full Is Full Employment?* American Enterprise Institute, Domestic Affairs Study No. 14, July 1973, pp. 3-8. See also John E. Bregger, "Unemployment statistics and what they mean," *Monthly Labor Review*, November 1971, pp. 23-24, and *Employment and Earnings*, December 1974, pp. 166-67.

in employment) took place in 1973. At that time, however, the increases were due to a relatively strong demand for labor, yielding virtually no increase in unemployment. The large September 1974 increases, however, took place in the face of a weakening labor market. Total employment grew only 1.4 million from September 1973 to September 1974, in contrast with a growth in employment of 3.1 million in the similar 1972-73 period.

Finally, although the growth in the unemployment rate was greatest among teenagers, it was extremely widespread, occurring among all groups of the population. Adult men and women, teenagers, whites, blacks, and both blue and white collar workers all experienced unemployment rate increases in September. In addition, several other important indicators confirmed the existence of worsening labor market conditions: the average factory workweek and factory overtime, the distribution of workers by reason for unemployment, the number of workers working part time for economic reasons, and the proportion of labor force time lost.

#### **SOME IMPORTANT LABOR MARKET INDICATORS**

Two important indicators of U.S. labor market conditions and general business activity are the average factory workweek and the level of factory overtime.<sup>5</sup> These data cover all production and nonsupervisory workers who received payment for any part of the pay period containing the 12th of the month. The factory workweek consists of all hours for which regular pay was received, including paid holidays, sick leaves, and vacations. Thus it does not coincide with the scheduled workweek. The number of factory overtime hours consists of

those hours, in excess of regular hours, for which overtime premiums were received.

The average factory workweek is classified as a leading indicator. This means that the workweek tends to rise and fall in advance of similar changes in the business cycle and thus it, along with other data, can be used to forecast future broad-based swings in the economy. For example, as the economy begins to slow down after a period of high demand and tight labor markets, employers' uncertainty as to the extent of the slowdown initially tends to result in a reduced workweek in advance of increased layoffs. Employers perceive the need to begin to trim production levels. However, instead of risking the possibility that they might soon have to incur the costs of rehiring laid-off workers, many employers choose first to hoard their labor but to reduce the workweek. As the slowdown becomes clearer and more pronounced, these same employers begin laying off workers and the unemployment rate rises.<sup>6</sup> The number of overtime hours tends to behave in a similar manner.

Recent developments in these data show precisely this pattern in the present recession. The factory workweek, which was at a recent high of 40.8 hours in September 1973, fell to 40.2 hours in July and August and then to 40.0 hours in September 1974. Similarly, factory overtime in September 1974 was at 3.3 hours, down 0.1 hours from August, and 0.5 hours from September 1973. Both of these indicators pointed to a weakening labor market and presaged the unemployment increase which followed in the fourth quarter of 1974.

Another important indicator of labor market developments is the change in the distribution among the unemployed of those who have either lost their jobs, left their jobs voluntarily, entered the labor force for the first time, or reentered the labor force after a period of

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<sup>5</sup>Both of these statistics refer to manufacturing and are obtained from the Labor Department's establishment series instead of the household survey. See *Employment and Earnings*, December 1974, pp. 168-74.

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<sup>6</sup>Sheldon Stahl, "Employment, Unemployment, and Economic Adjustment," *Monthly Review*, Federal Reserve Bank of Kansas City, July-August 1970, p. 9.

## Interpreting Recent labor

nonparticipation.<sup>7</sup> As the economy begins to turn down and the demand for labor weakens, several changes take place in the structure of unemployment. Workers who might have voluntarily left their jobs in a "tighter" labor market, either for increased leisure or to search for a better position, become increasingly reluctant to do so. On the other hand, firms begin to cut back on employment and to increase layoffs. Thus, in recessions, the proportion of job losers tends to increase while that of job leavers tends to decrease, despite the fact that both categories may increase in actual number.

Conflicting factors affect the number and proportion of reentrants and new entrants among the unemployed. While the declining availability of new jobs tends to discourage job search, the rising unemployment among primary workers tends to stimulate increased participation by other family members. This latter effect is accentuated in the present recession by the rapid rate of inflation, which spurs increased participation by secondary workers as families attempt to maintain their prior levels of real income.<sup>8</sup>

Recent developments in these data provide some useful insight into the nature of cyclical unemployment changes in the United States. On a seasonally adjusted basis, unemployment increased by almost 440,000 persons in September 1974. Of these, some 250,000 were new job losers, with the remainder either reentering the labor market or seeking their first job. The number of job leavers actually fell in September.

The number of new job losers represented 56.6 per cent of the new unemployed. This abnormally high proportion significantly raised the percentage of job losers among all unemployed persons, from 40.8 per cent in Au-

gust to 42.4 per cent in September. This sharp rise in the number and proportion of job losers represented one of the strongest indications of a rapidly deteriorating labor market, and marked the beginning of a trend which continued and worsened in the remaining months of the year. The September increase in the number of unemployed who were either reentrants or new entrants largely reflected the increasing joblessness among women and, especially, among teenagers, which was discussed earlier.<sup>9</sup>

The two remaining labor market indicators, the number of workers working part time for economic reasons and the proportion of labor force time lost, are closely related to one another. Part-time workers, persons who worked between 1 and 34 hours, are classified according to whether their reason for working part time is economic or otherwise. Workers classified as part-time for economic reasons are those workers who wanted to work full time, but were forced to work shorter hours due to such factors as slack work, material shortages, repairs to plant and equipment, start or termination of a job during the survey week, and the inability to find full-time work. Labor force time lost is a measure of the man-hours lost to the economy through unemployment and through part-time employment for economic reasons. It is expressed as a per cent of potentially available man-hours and is calculated by assuming "(1) That unemployed persons looking for full-time work lost an average of 37.5 hours, (2) that those looking for part-time work lost the average number of hours lost by voluntary part-time workers during the survey week, and (3) that persons on part time for economic reasons lost the difference between 37.5 hours and the actual number of hours they worked."<sup>10</sup>

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7/If a person lost or left his job but did not immediately seek employment, he is classified as a reentrant when he does begin to search for a job. New entrants, on the other hand, are persons who never worked at a full-time job lasting 2 weeks or longer.

8/See Zell, "A Labor Market Primer," p. 16, for a discussion of this phenomenon in the context of worker discouragement.

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9/For a further discussion of the classification of the unemployed by reasons for unemployment, see Curtis L. Gilroy, "Job losers, leavers, and entrants: traits and trends," *Monthly Labor Review*, August 1973, pp. 3-15.

10/*Employment and Earnings*, October 1974, p. 135.

On a seasonally adjusted basis, the number of nonfarm workers working part time for economic reasons remained relatively stable in July and August. In September, however, this number rose 310,000 to a 13½ year high of 2.8 million persons. This increase in "partial unemployment," coupled with the sharp rise in actual unemployment, caused the proportion of labor force time lost to shoot up from 5.8 per cent in August to 6.4 per cent of available man-hours in September. This represented a significant loss in potential output and was a strong indication of the developing recessionary trend in the economy.

#### FOURTH QUARTER DEVELOPMENTS

Labor market developments in the fourth quarter of 1974 provided ample evidence of this recessionary trend. In some sense, October represented the calm before the storm. The rate of unemployment, which had risen 0.4 of a per cent in September, increased only 0.2 of a per cent in October before exploding for 0.6 percentage point increases in both November and December." Yet even the October rise represented an increase in unemployment of approximately 240,000 to a seasonally adjusted level of 5.5 million unemployed. About two-thirds of the unemployment increase in October was due to job losers. In fact, of the 1.3 million persons who had become unemployed since the October 1973 low of 4.6 per cent unemployment, almost 60 per cent were job losers.

Adult males were the hardest hit in October as their unemployment rate climbed from 3.9 per cent in September to 4.3 per cent in October. Unemployment rates for adult females and teenagers showed little change from September, although both experienced substantial increases from the year earlier. Finally, black workers, whose unemployment rate increased in October from 9.9 to 10.9 per cent, made up a large

part of the total increase. The October upswing was particularly sharp for blue collar workers and reflected the increasing weakness in automobile and related industries.

In October, as through most of the year, employment either advanced slowly or stayed approximately constant. This trend, however, was radically changed in November as employment fell some 600,000 to a seasonally adjusted 85.7 million, a level little changed from November 1973. In December, this fall was continued, as total employment dropped by 500,000 to only 85.2 million, or almost 500,000 lower than December 1973. In November and December, therefore, total employment fell over 1.1 million, with adult men accounting for 620,000 of the decline, women for 245,000, and teenagers for some 234,000.

The civilian labor force, on the other hand, dropped only slightly in November and not at all in December. Unemployment, therefore, rose dramatically. In November and December, total unemployment rose more than 1 million to a seasonally adjusted 6.6 million. Not surprisingly, most of this advance was accounted for by persons who had lost their jobs. Of the total unemployed, job losers accounted for 41.1 per cent in July and 48.9 per cent in December. In the same period, the job leaver percentage fell from 15.5 to 12.1 per cent.

The other labor market indicators also pointed to a rapidly deteriorating economic situation. The factory workweek and the number of overtime hours both continued their decline. The seasonally adjusted workweek, which was at 40.6 hours in December 1973, fell to 40.1 hours in October and to 39.4 hours in December 1974. Similarly, the number of overtime hours decreased from 3.7 hours in December 1973 to 2.7 hours in December 1974.

The number of workers employed part time for economic reasons rose 450,000 in November and December to 3.4 million persons, almost 800,000 greater than in December 1973. When this measure is combined with the in-

11/This trend was strongly confirmed in January 1975, as the unemployment rate increased sharply to 8.2 per cent, its highest point in the entire post-world War II period.

crease in unemployment, the amount of labor force time lost was boosted sharply from 6.4 per cent in September to 7.9 per cent in December. In December 1973, on the other hand, the proportion of labor force time lost was only 5.4 per cent.

What was the pattern of unemployment in November and December? Not surprisingly, the unemployment increases in both months were extremely widespread. For adult males, whose rate of unemployment reached a low of 3.0 per cent in December 1973, the rate climbed from 4.3 per cent in October to 4.6 per cent in November, and finally, to 5.3 per cent in December 1974. Adult women were also greatly affected. Their unemployment rate rose a full percentage point in November to 6.6 per cent, and then climbed again to 7.2 per cent in December. The teenage unemployment rate rose from 17.1 per cent in October to 18.1 per cent in December.

These increases reflected the pervasive spread of unemployment throughout the economy and, in particular, the dramatic downturn in employment in the automobile industry. Thus, unemployment among manufacturing workers<sup>12</sup> closed the year at 8.9 per cent, up from 7.4 per cent in November, and from only 4.3 per cent in December 1973. Similarly, the unemployment rate in construction climbed from 8.2 per cent in December 1973 to 14.9 per cent in December 1974. It is not surprising then, that among blue collar workers, the unemployment rate rose from 5.2 per cent in December 1973 to 7.4 per cent in October, 8.3 per cent in November, and 9.3 per cent in December 1974. Finally, even among white collar workers, the 4.1 per cent unemployment rate in December was the highest level recorded since the

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12/Unemployed persons are classified by industry and occupation according to their latest full-time civilian job lasting two or more weeks. The unemployment rate in a particular industry or occupation is the ratio of the number unemployed to the sum of those employed or unemployed in the respective industry or occupation.

Bureau of Labor Statistics began collecting this series in 1958.

#### **UNEMPLOYMENT: A FURTHER VIEW**

In the light of these precipitous developments, it is important to examine from another angle an often asked question concerning the current labor market situation: Just how "serious" is the present unemployment? This question is generally posed with respect to two separate labor market developments; the changing age-sex composition of the labor force and the existence of an expanded range of benefits to aid unemployed workers.

According to several critics, the growing fears of unemployment have been greatly exaggerated. Albert Cox, Jr., chief economist of Lionel D. Edie and Co., noted recently, for example, that although the unemployment rate might soon exceed the 7.5 per cent of 1958, "The fact is, however, that such a degree of unemployment will be far less of a social tragedy than the public will be led to believe. . . ." The first of his reasons for this conclusion is the substantially greater availability of jobless benefits."

Clearly, current unemployment benefits greatly exceed those available during the Great Depression. The principal source of present benefits, however, remains the Federal-State Unemployment Insurance (U.I.) system, established in 1936. This is even more the case in 1975 as, since the first of this year, about 12 million previously uncovered workers were given temporary unemployment insurance coverage and the length of maximum coverage was extended for all other covered workers. Nevertheless, although certain industries have established programs to supplement these benefits, the actual number of recipients under these programs, as well as under U.I., falls far short of the total number of unemployed. Thus, although the number of unemployment insurance

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13/"Unemployment Dangers 'Exaggerated'," *Kansas City Star*, December 6, 1974.

recipients rose to an all-time high in January, this represented only about half of the total number of unemployed. Furthermore, while the system's goal is to compensate the unemployed for one-half of their lost earnings, the average level of unemployment insurance benefits in the country is only about \$64 per week.

Of the supplementary programs that do exist, the one most widely known is the United Auto Workers' Supplemental Unemployment Benefit (SUB) program. SUB was designed to complement the state unemployment program by making up the difference between what the state pays a worker and 95 per cent of his salary less \$7.50, the amount he would normally pay for lunch and transportation. A worker must be employed a full year before he is eligible for any SUB benefits. After that, he earns SUB credits at the rate of one credit for every 2 weeks of employment, to a maximum of 52 weeks of eligible compensation after 2 years of work. However, while the maximum compensation was to run for a full year, the program was not designed to cope with the present massive auto layoffs. Under this heavy pressure, the duration of benefits is sharply trimmed back as the amount of money in the fund falls below specified levels. This was already the case at General Motors in mid-December, when the reserve had fallen to 17 per cent of maximum funding. Similarly, it is estimated that at General Motors and Chrysler, the fund might have to suspend operation within a few months if layoffs continue at their present levels.<sup>14</sup>

Outside of the auto industry, supplemental benefits during layoffs are almost nonexistent. The only other large union with such a plan is the United Steel Workers. Under their program, the goal is to provide combined State-SUB benefits of about two-thirds salary, with a \$106 per week ceiling. The International

<sup>14</sup>/Joseph J. Bohn, "How SUB assists idled workers." *Automotive News*, December 2, 1974.

Ladies Garment Workers Union provides some benefits if an employer goes out of business, but none for conventional layoffs. In most other cases, then, the only alternatives to regular unemployment benefits are welfare and food stamps. Clearly, the effect of layoffs on morale and living standards remains extremely serious."

The other development which has attracted considerable analysis and commentary in recent years is the recognition of the changing age-sex distribution of the labor force and its effect on the interpretation of unemployment. In 1971, George L. Perry published a now widely cited article in which he attempted to explain the coexistence of inflation and unemployment.<sup>16</sup> He noted that the structure of the labor force has shifted markedly toward an increased proportion of women and teenagers. Thus, he concluded, the aggregate unemployment rate has become increasingly less comparable with that of earlier years. In particular, because there are relatively fewer highly skilled workers in the labor force, a given unemployment rate is now associated with a tighter overall labor market than was the case 10 or more years ago. To compensate for this structural shift, Perry devised a weighted unemployment rate in which individuals were weighted by an estimate of what they would produce if they were employed.

Perry's work was followed by numerous other models in which researchers constructed various weighted unemployment indices. In the most widely cited version, a "standardized" unemployment rate is constructed by weighting the actual present unemployment rates for each age-sex group by the proportion of the labor force which that particular group represented at some specified earlier time. Because women

<sup>15</sup>/A. H. Raskin, "The Unemployed Have Better Crutches Now, But Still Limp," *New York Times*, December 15, 1974.

<sup>16</sup>/George L. Perry, "Changing Labor Markets and Inflation," *Brookings Papers on Economic Activity*. 3: 1970, (Washington: The Brookings Institution. 1971). pp. 41 1-41.

## Interpreting Recent Labor

and teenagers have "traditionally" had higher rates of unemployment than men, and because they comprised smaller proportions of the labor force in earlier years, this weighting procedure would tend to result in a standardized rate which was lower than the present aggregate unemployment rate. Thus, for example, in the 1974 Economic Report of the President, the Council of Economic Advisors noted that: "If each age-sex group shown . . . is weighted according to its importance in the labor force in 1956, when unemployment averaged 4.1 per cent, one finds that the overall unemployment rate in 1973 would also have averaged 4.1 per cent rather than the 4.9 per cent actually experienced."<sup>17</sup>

There are, however, several major difficulties associated with this reasoning. Its principal flaw lies in the fact that the construction of a standardized rate tends to focus attention away from the actual labor market problems that currently exist given the present structure of unemployment. Policies which are keyed to a nonexistent unemployment structure are useless in a changing labor market. Furthermore, the emphasis on the "traditionally" higher unemployment of women and teenagers and the implication that this unemployment is not quite so significant, implies a clear social preference for unemployment in one group rather than another.<sup>18</sup>

While it is doubtlessly true that, in most cases, adult males are the primary wage earners in a family, this implied preference ignores several important phenomena. In addition, the weighting model itself has associated with it several implicit assumptions which are rather improbable.

Over the years, the structure of the labor force has clearly changed. At any given time, however, that structure is a function of basically two factors: the size and age-sex distribution of

the population, and the rates of participation of the various demographic groups. The first of these factors is mainly a function of the historical pattern of birth rates, which, to some extent, reflects changing social values and events. For example, as a result of the post-World War II "baby boom," the young adult component of the labor force grew nearly five times as fast as the mature adult segment from 1960 to 1971.<sup>19</sup>

For the most part, though, the changing structure of the labor force is due to long-term changes in participation rates among the several population groups. For example, in 1960, adult females had a participation rate of 37.6 per cent. By 1974, this rate had risen to 45.2 per cent. Similarly, the rate for all teenagers rose from 47.5 to 54.9 per cent. For adult males, on the other hand, rates fell from 86.0 per cent in 1960 to 81.0 per cent in 1974 (Table I). The reasons for these changes are complex. For older male workers, they include changing laws on retirement and altered valuation of leisure. For adult females, they include altered conceptions as to the role of women in society and, in particular, the related rapid rise in education among women. For both women and teenagers, they include the tremendous rise in the cost of living and the associated attempt to maintain real family income. The effect of all of these changes is that women are becoming to an ever greater extent co-earners and primary workers rather than secondary workers.

The implicit assumptions in the weighting model can be seen by examining Table I. In that table, the population is divided into three categories: all teenagers (16-19 years of age), adult males, and adult females. The changing population and labor force distributions as well as the changing participation rates which occurred between 1960 and 1974 are easily seen. In 1960,

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17/Carolyn Shaw Bell, "The Economics of Might Have Been," *Monthly Labor Review*, November 1974, pp. 40-42.  
18/*Ibid.*

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19/Leonard G. Bower, "Changes in Composition Affect Unemployment," *Business Review*, Federal Reserve Bank of Dallas, February 1973, pp. 1-6.

**Table 1**  
**POPULATION, LABOR FORCE PARTICIPATION, AND UNEMPLOYMENT**  
**RATES OF CIVILIAN NONINSTITUTIONAL POPULATION BY**  
**AGE AND SEX: 1960 AND 1974**

	Population	Per Cent of Population	Labor Force	Per Cent of Labor Force	Per Cent Participation Rate	Unemployment Rate
<b>1960*</b>						
All	117,245	100.0	69,628	100.0	59.4	5.5
Teenagers (16+ yrs.)	10,187	8.7	4,841	7.0	47.5	14.7
Males (20+ yrs.)	50,698	43.2	43,602	62.6	86.0	4.7
Females (20+ yrs.)	56,360	48.1	21,185	30.4	37.6	5.1
<b>1974*</b>						
All	148,599	100.0	91,011	100.0	61.2	5.6
Teenagers (16+ yrs.)	16,055	10.8	8,813	9.7	54.9	16.0
Males (20+ yrs.)	62,149	41.8	50,363	55.3	81.0	3.8
Females (20+ yrs.)	70,396	47.4	31,836	35.0	45.2	5.5

Using the 1960 Labor Force Distribution as Weights:

	1960 Labor Force Distribution (per cent)	Standardized*	
		Labor Force †	Unemployment Rate
<b>1974</b>			
All	100.0	91,011	5.2
Teenagers (16+ yrs.)	7.0	6,371	—
Males (20+ yrs.)	62.6	56,973	—
Females (20+ yrs.)	30.4	27,667	—

\*Data are not strictly comparable between years due to the introduction of population adjustments in 1970, 1972, 1973. For an explanation, see "Historic Comparability," *Employment and Earnings*, December 1974, pp. 164-65.

† The standardized participation rate is the ratio of the standardized labor force to the actual 1974 population.

SOURCE U.S. Department of Labor News Release, January 10, 1975. "Labor Force Developments Fourth Quarter of 1974," Table 8.

Manpower Report of the President, 1973, Tables A 1, A 3, A 7, A 15.

the aggregate unemployment rate was 5.5 per cent, versus 5.6 per cent for all of 1974. However, because the structure of the labor force changed greatly over these years, a lower "standardized" unemployment rate for 1974 may be calculated by using 1960 labor force proportions for the three groups and 1974 unemployment rates. If this is done, the 1974 aggregate unemployment rate is reduced to a "standardized" 5.2 per cent. This calculation, however, completely ignores shifts in the job and population structures between 1960 and 1974. In particular, by using the 1960 weights,

and thus increasing the adult male proportion in the labor force, it is implicitly assumed that males will be willing and able to fill every job relinquished by the necessarily declining proportions of females and teenagers. In fact, they would have to fill many more jobs than currently exist or else the unemployment rate would not fall as calculated in the model.

Finally, in order for the age-sex distribution of the present labor force to be altered in the manner assumed by the weighting procedure, the participation rates of the three age-sex groups would also have to be altered

radically (Table 1). In particular, because the age-sex composition of the population has also changed over time, the **artificially** altered labor force shares would result in participation rates of 91.7 per cent for adult males, 39.3 per cent for adult females, and 39.7 per cent for teenagers. This, however, would represent a higher level of participation for adult males, and a lower level of participation for teenagers, than has existed in our economy since at least the end of World War II. It would also imply a pattern of change in participation rates that runs counter to that which has, in fact, occurred.

From this analysis, it is clear that it is misleading to simply assume away the major

structural changes that have taken place in the labor market over the past several years. It is incorrect to claim for either the published total unemployment rate or for the standardized unemployment rate, the ability to correctly capture all of the complex unemployment developments in the economy. As stressed earlier in this article, it has become increasingly necessary to look beyond the total unemployment rate at a broad range of other measures. The weighting model, however, can serve an important purpose if used to highlight the impact of these structural changes upon the economy and to aid in the preparation of plans to deal with the problem of unemployment as it currently exists.