

Recent Developments in The Theory of Unemployment

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Over the 40 years since the Great Depression, economists have developed a variety of theories to explain the phenomenon of unemployment. Many of these explanations are products of their time, emerging as the result of major social and economic developments. Yet, all such models have at least one thing in common. They represent attempts by their proponents to provide a theoretical framework within which policy prescriptions can be developed.

This article examines four recent theoretical explanations for the problem of unemployment: the theory of structural unemployment, the job-search, labor-turnover theory, the theory of human capital, and the dual labor market hypothesis. These alternative approaches are examined with particular emphasis on their respective views of the structure and behavior of the labor market, and especially, on the policy prescriptions which follow from these different views.

INADEQUATE DEMAND OR STRUCTURAL UNEMPLOYMENT?

Given the experience of the Great Depression, there has understandably been much interest in diagnosing the causes of unemployment. From a policy standpoint, however, the more important question is why workers who

lose their jobs are not quickly reemployed, and why many new entrants or reentrants to the labor force remain without jobs. As noted by Gilpatrick, if reemployment is assured, the reasons for the original unemployment are of little interest. Thus, "the causes blocking reemployment are the proper targets for policy."¹

One long-standing controversy over the persistence of unemployment developed in the late 1950's and early 1960's between the advocates of inadequate aggregate demand theory and the proponents of the school of structural unemployment. This controversy arose at a time when the national unemployment rate seemed to lose its resiliency. From 1951 through 1957, the unemployment rate exceeded 5 per cent of the labor force only in one year, 1954. Then, after reaching its recession high of 6.8 per cent in 1958, the unemployment rate did not fall below 5 per cent for 7 years.

In 1961, the Joint Economic Committee conducted a series of hearings² to try to determine whether structural factors or inadequate

¹Eleanor G. Gilpatrick, *Structural Unemployment and Aggregate Demand* (Baltimore: Johns Hopkins Press, 1966), p. 2.

²U. S. Congress, Joint Economic Committee, Subcommittee on Economic Statistics, *Higher Unemployment Rates, 1957-60: Structural Transformation or Inadequate Demand, 87th Congress, 1st Session* (Washington: U. S. Government Printing Office, 1961).

demand were responsible for the high unemployment the country had been experiencing since the closing months of 1957. The distinction between these two explanations for the persistence of unemployment appeared crucial from the viewpoint of policy. The advocates of the inadequate demand theory, most notably Walter Heller, then chairman of the Council of Economic Advisors, tended to dismiss the significance of structural unemployment. They argued instead that the persistently high unemployment was due to the incomplete recovery from the 1957-58 recession. The solution therefore lay in more expansionary fiscal policies such as lower taxes and greater government spending.

The structuralists, on the other hand, viewed the unemployment as arising from a change in the composition of labor skill requirements relative to labor skill availability. They argued that this structural mismatch could arise in several ways, regardless of the level of aggregate demand. For example, technology may change, the demand for certain products may disappear, raw materials may be used up in a given geographic area, a factory or industry may change its location, or the proportion of different skill groups in the population may change over time.

As long as the labor force is able to adapt to these changes, said the structuralists, no problem exists. But if people are unwilling or unable to move to a different geographic area where workers with their qualifications are in demand, if their skills have become obsolete, or if their skills are of limited transferability and their numbers in the labor force increase without a concomitant increase in the demand for their services, structural unemployment is the result.³

Arguing that a combination of these developments was at the root of the persistently high unemployment, the structuralists claimed that a policy of adapting the unemployed to available job openings would substantially re-

duce the unemployment rate at the *current* level of national income. Because they believed the problem to be structural in nature, they further claimed that an attempt to reduce the unemployment through increasing aggregate demand would succeed only at the cost of substantial inflation as bottlenecks appeared.⁴

Following extensive debate, the inadequate demand view prevailed in Washington, and the 1964 income tax cut was passed in an attempt to stimulate demand. This provided a test of these two alternative theories which seemed to substantiate the inadequate demand position. In 1965, the unemployment rate fell below 5 per cent and then remained below 4 per cent from 1966 to 1969.⁵ Nevertheless, a great deal of interesting work has been done on the concept of structural unemployment, and it remains a potentially useful tool for explaining certain occurrences of unemployment, especially when the economy is functioning much closer to full employment than was the case in the late 1950's and early 1960's.⁶

SOME NEW THEORIES OF UNEMPLOYMENT

Since the structuralist-inadequate demand controversy of the early 1960's, economists

3/Gilpatrick, pp. 4-5. Also Barbara R. Bergmann and David E. Kaun, *Structural Unemployment in the United States*. U. S. Department of Commerce (Washington: U. S. Government Printing Office, 1966), pp. 4-5.

The classic example of workers' unwillingness to move to another geographic area is the case of unemployed coal miners in Appalachia in the 1950's and 1960's. Similarly, railroad firemen represent persons whose skills have become obsolete, while minority teenagers, with skills of limited transferability, have increased their labor supply in excess of the increase in the demand for their services.

4/Richard Perlman, *Labor Theory* (New York: John Wiley and Sons, 1969), p. 167.

5/Besides the tax cut, spending for the Vietnam war greatly stimulated the economy during these years. While the resulting fall in unemployment supports the view that demand had been inadequate, the accompanying climb in the rate of inflation, to a level consistently above 3 per cent since 1966, points to the existence of inflationary bottlenecks which arise when the economy is subjected to too rapid a rate of expansion.

6/Gilpatrick, *Structural Unemployment and Aggregate Demand*, and especially Perlman, *Labor Theory*, ch. 7, present strong evidence of the existence of structural unemployment and argue convincingly that "much of the confusion in evaluating the impact of structural aspects has resulted from illogical or loose definitions of the term...".

have generally agreed about the cause of the increase in unemployment and its persistence during and following a recession. The recessionary falloff in the demand for goods and services leads to a rise in the unemployment rate, while the uncertainty of a recovery, the increased productivity of those already employed, and the knowledge of the availability of a pool of unemployed workers delays rehiring once the economy begins to turn around. Yet even when the economy was functioning near the limits of its capacity, as in the late 1960's, the overall unemployment rate still hovered just below 4 per cent of the labor force, while for some population groups, it was considerably higher.

Observing this phenomenon, several economists attempted to answer what has become a central question in current unemployment theory: "Why is the unemployment rate so high at full employment?"⁷ Three important theories which deal directly with this question are, respectively, the job-search, labor-turnover theory; the theory of human capital; and the dual labor market hypothesis.

The notion of the level of "full employment unemployment" is not unambiguous. One approach suggests that the level of "full employment unemployment" in the United States is a rate of unemployment (say, 4 to 5 per cent) which, if maintained permanently, is compatible with some steady rate of inflation (say, 3 to 4 per cent per year).⁸ When the economy is operating at full employment (as defined in this way), an increase in aggregate demand can lower the unemployment rate further, but only at the expense of higher and higher rates of inflation. The question that the various theories of unemployment must deal

with is why the full employment level of unemployment (resulting in a steady and relatively low rate of inflation) is reached at so high a rate of unemployment.

The Job-Search, Labor-Turnover Theory

Of the three theories of unemployment noted, the formal search-turnover model most directly draws a functional relationship between unemployment and inflation.⁹ Characterized as "a rigorous theoretical development of the traditional notions of frictional unemployment,"¹⁰ the search-turnover theory views unemployment as the result of a search process, where both employers and workers have limited information about the opportunities in the labor market. According to this explanation, when a worker begins looking for a job, either from a state of nonparticipation or previous employment, it is generally not in his economic interest to take the first available position. Lacking basic information on the opportunities in the labor market, the worker instead searches for information on the types of jobs, level of wages, and working conditions available to a person of his qualifications. He therefore spends time unemployed while learning about jobs and waiting for better job offers.

Thus, according to the search-turnover theory, unemployment represents a type of investment by workers in obtaining information about the labor market. Unemployment persists because the labor market is inefficient in providing this information and thus fails to quickly match workers and job vacancies. Taking the existing patterns of labor supply and demand as given, the proponents of this theory suggest that unemployment can be substan-

7/This is the title of a study by Robert E. Hall, "Why Is The Unemployment Rate So High At Full Employment?" *Brookings Papers on Economic Activity* (No. 3: 1970), pp. 369-402.
8/Hall, "Why . . .", p. 370. It has been suggested that because of a changing age-sex composition of the labor force, the trade-off between the rates of unemployment and inflation may actually be worsening over time. See George L. Perry, "Changing Labor Markets and Inflation." *Brookings Papers on Economic Activity* (No. 3: 1970), pp. 411-41.

9/See, for example, Charles Holt and Associates, "Manpower Proposals for Phase III," *Brookings Papers on Economic Activity* (No. 3: 1971), pp. 703-22.

10/Robert E. Hall, "Prospects for Shifting the Phillips Curve Through Manpower Policies," *Brookings Papers on Economic Activity* (No. 3: 1971), p. 660. Frictional unemployment is temporary unemployment which arises due to the time required for finding or changing jobs.

tially reduced through a comprehensive program of manpower policies. In particular, this would include a several-fold expansion in the Federal-State Employment Service to improve the quality and speed of worker-job matches and to reduce turnover; improved vocational counseling and expanded job opportunities for youth to reduce their high turnover and to increase their future productivity; training and job restructuring to reduce skill shortages in certain occupations; support of geographic mobility to reduce pockets of high unemployment while good jobs remain unfilled elsewhere; and elimination of institutional barriers, such as union restrictions on entry and occupational licensing, which increase unemployment by reducing the efficiency of search. All of these policies are based on the belief that an improvement in the inflation-unemployment trade-off can only be achieved by reducing the "frictions" within the labor market and thereby improving its efficiency.¹¹

There is much to be said for this view of the labor market with its emphasis on turnover as the principal element in unemployment. Data on the duration of unemployment in the United States indicate clearly that the Keynesian view—that high unemployment is caused by the long-term inability of some fraction of the labor force to find jobs—is invalid in the modern U.S. economy when it is functioning near "full-employment." Instead, the high unemployment rates are the result of frequent, generally short spells of **unemployment**.¹²

11/Holt, "Manpower Proposals . . .", pp. 712-16. Along the lines of the first of these proposals, the U. S. Manpower Administration has recently initiated a 15-state, Federally funded pilot program designed to encourage both employers and employees to register their manpower needs and skills with their state office of employment security. Missouri is one of the participants in this project. Dale Leibach, "Program To Match Jobs To People," *Kansas City Times*, July 11, 1975.

12/Hall, "Prospects . . .", p. 660. Also see Hall, "Turnover in the Labor Force," *Brookings Papers on Economic Activity* (No. 3: 1972), pp. 709-56 and Steven P. Zell, *A Comparative Study of the Labor Market Characteristics of Return Migrants and Non-Migrants in Puerto Rico* (Commonwealth of Puerto Rico, Puerto Rico Planning Board, Bureau of Social Analysis, 1974), chs. 6 and 8.

Nevertheless, Hall and other economists find fault with the implicit premise of the search theorists that "every person who finds himself out of work is spending a few weeks between jobs in the normal advancement of his **career**."¹³ This, they feel, incorrectly represents the labor market situation of teenagers, of women, and, in particular, of the unskilled and uneducated segments of the labor force.

The central problem seems to be that some groups in the labor force have rates of unemployment that are far in excess of the rates that would accord with the hypothesis that the unemployed are making a normal transition from one job to another. Some groups exhibit what seems to be a pathological instability in holding jobs.¹⁴

Both the theory of human capital and the dual labor market hypothesis represent attempts to explain this seemingly pathological job instability. Yet, because they represent very different viewpoints as to the nature of the problem, their respective analyses and policy prescriptions differ greatly.

The Theory of Human Capital

In many respects, the theory of human capital is simply a logical extension of the underlying assumptions about human behavior on which most of modern economic theory is based. According to these assumptions, economic man is rational man, and all of his decisions are based on deliberate economic calculations.

The theory of human capital extends this **concept to the determination of the distribution of income and unemployment. Emphasizing individual choice, this theory concludes that the existing distribution of income and unemployment reflects differences in the levels of education and training, which, in turn, are the direct result of decisions by individuals**

13/Hall, "Why . . .", p. 389.

14/*Ibid.*

whether or not to invest in **themselves**.¹⁵ From this premise it follows that the unemployment problem of disadvantaged workers is a problem on the supply side rather than on the demand side of the labor market. That is, because these workers lack the basic skills necessary to make it worthwhile for employers to hire them at the prevailing level of wages, the amount of labor they are willing to supply at this wage level exceeds the **demand** for their services by employers, and unemployment results. Thus, the inability of these workers to find and hold stable employment is due to insufficient investment in their own human capital. This theory suggests, then, that the appropriate policy to reduce the unemployment of disadvantaged workers consists of extensive manpower training and skill upgrading.

In many respects, this policy prescription is very similar to that of the structuralists, and both of these schools strongly influenced the format of the great majority of modern Federal manpower programs. These programs began in 1961 with an emphasis on training unemployed workers in **regions** with high unemployment, but gradually shifted their focus from regional unemployment to unemployment of specific groups of disadvantaged workers.

The theoretical foundation for the earliest of these programs was provided by the theory of structural unemployment. Holding that structural factors and wage rigidities prevented employers from hiring poorly or inappropriately trained workers, this theory suggested that training would raise the productivity of these workers to a level where they could obtain employment. Thus, though the structuralists viewed the unemployment as arising from a structural disequilibrium in the labor market, while the human capital school saw the problem as one of inadequate personal in-

vestment by individuals, both agreed the solution lay in expanded training for unemployed disadvantaged **workers**.¹⁶

In the late **1960's**, however, it was observed that despite substantial labor market tightening and numerous low-paying job vacancies, disadvantaged workers continued to experience high rates of unemployment. As correctly noted by the search theorists, the problem was clearly not one of a chronic job shortage for disadvantaged workers, but rather a situation of excessively high labor turnover. Nevertheless, the human capital approach still appeared to be relevant if its emphasis was changed from merely qualifying these workers for any job, to qualifying them for good high-paying jobs at which they might stay.¹⁷

The Dual Labor Market Hypothesis

To another group of economists, however, both the human capital and search-turnover approaches seemed seriously flawed. While these two theories differ in many respects, they share the belief that labor markets are shaped by economic motivation within an essentially competitive framework. "Relative wages are assumed to be flexible, employers are believed willing and able to adjust their employment in **response** to changes in wages and productivity, and workers are assumed to make training and information investments easily in response to changes in relative **wages**."¹⁸

Claiming that these premises were unrealistic and misleading, these economists **devel-**

16/While one policy prescription of the search-turnover approach also stresses job training, this is done as part of a multifaceted program operating on both the demand and supply sides. Thus, in addition to providing job training for workers, it is also proposed that employers be aided in restructuring their jobs to better fit available manpower. The emphasis is not one of upgrading the skills of the disadvantaged, *per se*, but rather one that concentrates on eliminating skill mismatches in sectors of the economy which contribute excessively to inflation. "The unskilled and disadvantaged . . . will benefit disproportionately from the vacuum effects of general upgrading and the overall reduction of unemployment that can occur." Holt, pp. 720-21.

17/Hall, "Prospects. . .", pp. 661, 674-81.

18/Doeringer and Piore, "Unemployment . . .", p. 71.

15/Peter B. Doeringer and Michael J. Piore, "Unemployment and the 'Dual Labor Market'," *The Public Interest*. No. 38, Winter 1975, pp. 69-70.

oped an alternative view of labor market behavior which has come to be known as the dual labor market hypothesis. An outgrowth of both the civil rights and anti-poverty experience of the 1960's, this school views unemployment as "rooted less in individual behavior than in the character of institutions and the social patterns that derive from them."¹⁹ Much more of a "sociological" and "institutional" approach rather than a purely economic approach to the labor market, it deals specifically with trying to explain the seemingly excessive job turnover in what its proponents call "the secondary sector."

As advanced by Peter B. Doeringer, Michael J. Piore, and others,²⁰ the hypothesis views the economy as being conceptually divisible into a primary and a secondary sector. The **primary sector** is characterized by good jobs, high wages, satisfactory working conditions, employment stability, and prospects for promotion. The **secondary sector**, its antithesis, is characterized by bad jobs, low wages, poor working conditions, layoffs, little chance for advancement, and high turnover. When a primary-sector worker becomes unemployed, he is unemployed in the involuntary, Keynesian sense. He is out of his accustomed place in life, and though he may temporarily accept other, less attractive work, he is essentially waiting to regain his lost position. Unemployment in the secondary sector, however, is not at all like this. Rather than consisting of people waiting to regain a lost position, it is more a process of shuttling from one low-paying position to another.²¹

According to this theory, while white adult males are usually employed in the primary sector, women, teenagers and, in particular, minority groups are generally confined to the

secondary sector. But because secondary firms provide little specific on-the-job training, because there is only a limited chance for advancement, and because a worker's current wage is unlikely to differ widely from that available in a great number of other similar jobs, a worker finds little incentive to either stay on the job or to perform particularly well at it. Hence, once a worker is in the secondary sector, the unstable work environment encourages the adoption of certain poor work habits: "casual devotion to job, reporting for work late or not at all on some days, and quitting without good reason often within months of taking the job."²² It is these habits which most clearly distinguish the primary and secondary sectors and which make movement into the primary sector so much more difficult. In addition, this vicious circle is reinforced as secondary-sector employers are unwilling to invest heavily in the training of a work force which is prone to high turnover, and simultaneously, are less reluctant to fire a worker in whom they have little invested.²³ These factors thus tend to result in entrapment in the secondary sector.

Above and beyond this entrapment, which helps to perpetuate the low productivity of secondary workers, the dualists identify two principal explanations for the continued duality in the face of market forces which would tend to eliminate the wage disparity between the two sectors.

The first of these explanations, restrictive practices, generally represents legalized barriers to the occupational mobility of workers. The prime example of this is occupational licensing by the state, where access to the skilled trades is often controlled by license boards composed of licensed members of the supervised occupations. These persons have strong economic incentive to keep the number

¹⁹/*Ibid.*, p. 72.

²⁰/Peter B. Doeringer and Michael J. Piore, *Internal Labor Markets and Manpower Analysis* (New York: Heath, 1971) and Michael J. Piore, "Jobs and Training," in Samuel H. Beer and Richard Barringers (eds.), *The State and the Poor* (Winthrop, 1970).

²¹/Doeringer and Piore, "Unemployment . . .", pp. 70-71.

²²/Hall, "Prospects . . .", p. 683.

²³/Doeringer and Piore, *Internal Labor Markets*, pp. 165-72. Also, Michael L. Wachter, "Primary and Secondary Labor Markets: A Critique of the Dual Approach," *Brookings Papers on Economic Activity* (No. 3: 1974), p. 651.

of workers permitted to practice their trade at an artificially low level in order to raise the wages of those already licensed. A similar restrictive practice is followed by unions who can maintain an artificial scarcity of good jobs either through a close control of the number of apprentices (as in the craft unions) or through negotiating so high a wage that employers decide to hire fewer workers than are willing to work at that high a wage level.²⁴

The second explanation for the continued duality, discrimination, is viewed as operating in two ways, through statistical discrimination, and discrimination pure and simple. Statistical discrimination represents an attempt to simplify the hiring procedure by assuming that certain poor work habits are closely related to personal characteristics such as race, age, or sex. Under this procedure, a number of job candidates may be wrongly rejected even though they are actually qualified. This kind of discrimination, in conjunction with outright discrimination, enlarges the secondary work force while reducing the supply of labor to the primary sector. It thereby gains the economic support both of secondary employers, who now pay a lower wage, and of primary employees, who now receive a higher wage. Furthermore, although primary employers receive no economic gain from outright discrimination, the higher wages they must pay are compensated by the reduced costs of screening job candidates through the use of statistical discrimination.²⁵

If this dual labor market schema is correct, then the potential effectiveness of the skill training programs proposed by the human capital school is open to serious question. The dualists have noted that a great part of the training necessary for workers to satisfactorily perform in the primary sector cannot be purchased in schools or elsewhere. Rather, it is only available on the job, and, in order to ac-

quire this training, the worker first must be hired, and then must be accepted by the established group of workers who must teach him what they are doing. In other words, "social acceptability," which is directly related to such characteristics as race, sex, and shared social beliefs, is a key factor in obtaining "primary-sector" skills and a job in the primary sector, and this "social acceptability" cannot be purchased in the usual sense.²⁶

Within this framework, the proponents of the dual labor market hypothesis develop a number of policy options which focus on the *institutional* forces they feel underlie the structure and behavior of the labor market. In particular, they propose policies to eliminate discrimination and restrictive practices which have kept people out of the primary sector, and policies to shift the demand for labor, and thus jobs, out of the secondary and into the primary sector.

While their anti-discrimination policy calls for an intensive, but straightforward, use of instruments like civil rights legislation and Federal contract compliance programs, the dualists' proposals for shifting jobs from the secondary to the primary sector are more complicated. Basically, the dualists suggest a two-pronged attack: (1) having the government impose the characteristics of the primary sector on the secondary sector through expanded coverage of (and higher) minimum wages, encouraging unionization, and expanded coverage of social legislation; and (2) adopting a long-run, stable, full-employment policy.

The first set of programs is designed primarily to convert secondary sector jobs into jobs with primary-type characteristics. Some examples of occupations which, to some extent, have already undergone this type of conversion are longshoring, unskilled construction labor, and office cleaning. It is assumed that these policies, which, in effect, are designed to legislate higher wages, would also

24/Hall, "Prospects...", p. 684.

25/Piore, "Jobs and Training," p. 56.

26/Doeringer and Piore, "Unemployment...", p. 72.

tend to stabilize employment and develop promotional ladders as the alternative, secondary job structure becomes more costly for employers. Hospital and hotel jobs, for example, might be particularly susceptible to this kind of **conversion**.²⁷

The second type of program, adopting a long-run, stable, full-employment policy, is directed at significantly expanding the primary sector. While acknowledging that the full-employment policy which has been followed in this country has not accomplished this goal, the dualists claim that this has been due to its stop-and-go nature. Employers who believe an expansion to be temporary, say the dualists, are reluctant to admit workers to the primary labor market. Rather than incur the costs of training and providing career benefits, and the problems which might arise from the structural changes involved in this expansion, employers would rather rely on subcontracting and temporary employment from the secondary sector. If, however, employers can be convinced of a strong public commitment to stable full-employment, corresponding to an unemployment rate of between 3 and 4 per cent, they would then be much more likely, claim the dualists, to significantly expand the number of jobs in the primary sector.²⁸

CONCLUSION

The dual labor market approach, with its emphasis on the interrelationship between economic, sociological, and institutional var-

iables, has attracted considerable attention in recent years both within and outside the economic profession.²⁹ Nevertheless, neither it alone nor the alternative theories of human capital and search-turnover, present a complete picture of the problem of unemployment. Due to the complexity of the labor market, all three theories fail to consider important aspects of the problem, and all three necessarily incorporate simplifying assumptions about the structure and behavior of the labor market.

Thus, for example, the dualists, in their policy prescriptions, implicitly assume that secondary workers have all of the necessary human capital needed to succeed in primary-type employment. To the extent that this assumption is incorrect, their proposals to legislate higher wages in the secondary sector and to expand the primary sector could lead to both higher unemployment and inflation unless also coupled with programs to encourage formation of physical and human capital, improve job matches, and discourage turnover. Therefore, rather than choosing between the alternative theories, it is more instructive to view them as an important set of complementary perspectives on the nature of unemployment, which, when taken together, correctly portray the problem of unemployment as a complex interrelationship of supply, demand, informational, and institutional factors.

27/Doeringer and Piore, "Internal . . .", pp. 181-82, and Wachter, pp. 672-73.

28/Doeringer and Piore, "Unemployment . . .", pp. 78-79.

29/See Wachter, p. 638, and Hall, "Prospects . . .", p. 682.