

SEARCH THEORY

Search Theory relates to Labor Economics by trying to explain unemployment and the search for jobs, using fundamentally Neo-Classical assumptions. These assumptions lead to differing reactions from various groups. As expected, Monetarists by and large support Search theory while other groups, simply called "Non-Monetarists" have a range of views concerning Search Theory.

Monetarists promote Search Theory because of its foundation in Classical thought. Search Theory asserts a Classical labor market where forces of supply and demand determine an equilibrium wage. In addition, Search Theory goes along with the assumption that only voluntary unemployment exists. All individuals wishing to work at the prevailing wage rate are able to find employment.

Non-Monetarists are concerned about a number of things and thus have a variety of perspectives concerning job search. "The psychology of unemployment" analyzes the impact of search on the status, attitude, and psychology of an individual. Those that view labor unions as being successful in forcing concessions from employers and those that feel unions can be instruments creating a non-competitive labor market, have reservations on Search Theory. Post-Keynesians, believing in non-voluntary unemployment, and using a money wage, also have difficulty accepting the Monetarist model.

Because the scope of this study is within the field of Economics, economic reasoning will primarily be presented in demonstrating objections to Search Theory.

It seems obvious that no one could ever hope to know of **all** available jobs and wage rates. Such a search would take too long and simply cost too much relative to the benefit a searcher could derive from this list of positions. Furthermore, just keeping the list up to date would require a tremendous effort. Search Theory attempts to provide for these considerations in portraying the pursuit of employment.

ASSUMPTIONS AND DEFINITIONS

Search Theory, like most economic models, relies on certain assumptions. As stated earlier, Search Theory borrows its assumptions and definitions from the Neo-Classical school. It is important to clearly understand each of the assumptions and definitions not only to grasp the intentions and significance of the model but also to gain insight into some weaknesses and criticisms of the theory.

"Frictional Unemployment" is given as the number of unemployed workers which are not fully aware of all the job opportunities or wages available. This lack of knowledge is the result of limited information in the labor market. On the other hand, employers do not know about available labor either. Thus, a time lag exists in filling vacancies. Incomplete knowledge also supports a view for the searcher that

a "better" job may be "just around the corner."

Search is assumed to have a positive cost. In other words, it costs the searcher to look for employment. This cost has two components. The first is the cost of the actual search like buying newspapers, telephone expense, transportation, etc. The second component is the opportunity cost of not working. Because jobs are available, the cost of looking for a "better" job is the foregone income at the previous job while the search continues. It follows that less time will be spent searching the higher the cost of search.

Wages are assumed to be offered within a probable distribution range ($P(W)$). One job may pay more or less than another offer. However, over a number of offers, a distribution will be established. Thus, not only is the future uncertain, but the present also remains unknown in Search Theory, as potential employers look for suitable labor and labor in turn hunts for desirable placement. No one knows exactly who is looking for employers, at what wage, where, and with what characteristics. Similarly, no one is certain of differences in skill, adaptability, experience, knowledge, and so forth, of searchers. Yet, it would be expected that, for each individual, the more easily potential positions can be found, the less dispersion of wages offered. In addition, because search cost is lower with increased probability in finding employment, when employment is augmenting, dispersion

of wages should decline. Furthermore, the more time spent searching, the less chance an employer will have to realize a savings in offering a lower wage rate.

Unemployed persons are divided into two basic groups. "Searchers" are those individuals that are willing to incur the cost of search. "Non-searchers" include the unemployed who do not pay the cost of search to look for a job.

In order for the Search Theory to function properly, it has been assumed that individuals can only search effectively while unemployed. A person can not, the theory assumes, hold a job AND look for new employment at the same time. If this were possible, the cost of search would not be nearly so high.

Still another assumption of the theory is the search process yields exactly one offer per day. These offers are also assumed to be storable at least in the short to medium run. Thus, the cost of search can be seen to provide at least a chance for an acceptable offer each day the search is continued. Because employers must also seek labor in an imperfect labor market, only a finite number of applicants will fill out applications in a limited time period. Because filling a vacancy is probably more important to an unemployed individual than to the potential employer, it is relatively less expensive for a searcher to look for a firm than for an employer to try to find a qualified candidate. Thus,

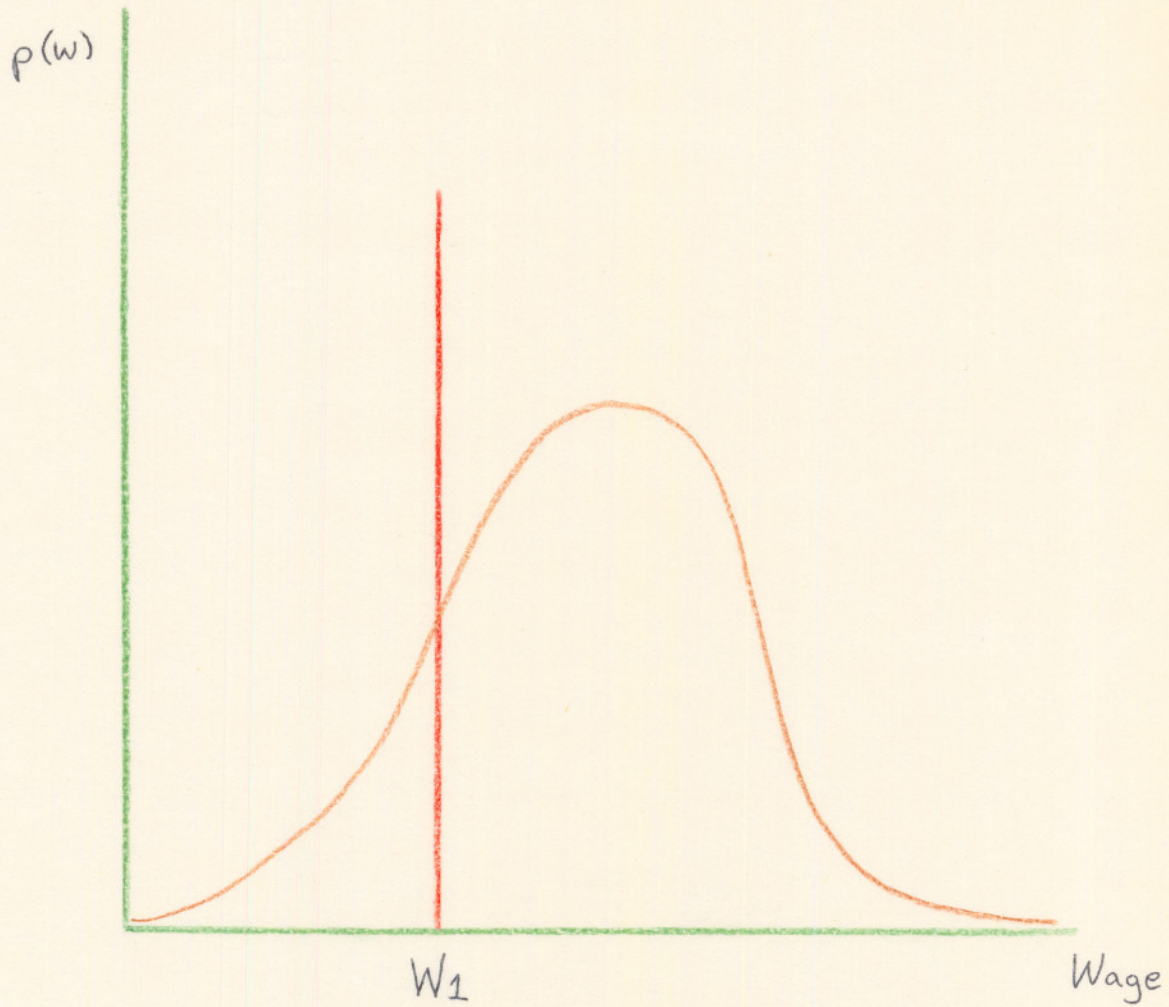
solicitation is usually performed by an individual rather than a firm.

Search time is not wasted. The return for search is information about the job market. Information, as capital, is the product of the cost of search. The yield of the information is a higher wage rate than would have been obtained without a search process. Thus, search is an efficient investment in the allocation of time producing better utilization of skills in the labor market.

ILLUSTRATION OF THE MODEL

Using the numerous assumptions, a model can be made to illustrate the process involved in looking for employment. The variable "C" we will let equal the average daily cost of continued search. Let "W1" be the wage rate offer of the first situation, "W2" be the wage rate offer of the second, "W3" the offer of the third, and so on. After each offer, the individual can accept the job or can reject the offer.

On graph number 2, the first offer (W1) is given. The distribution provided is one which the searcher believes to be his own true distribution of wages he can expect to receive. To this point, the cost of search is only expenses like newspapers, transportation, and so on, minus any unemployment benefits that may be provided by the government. In algebraic terms, cost of search = $C - g$, where g = government payments for unemployment compensation. To continue to

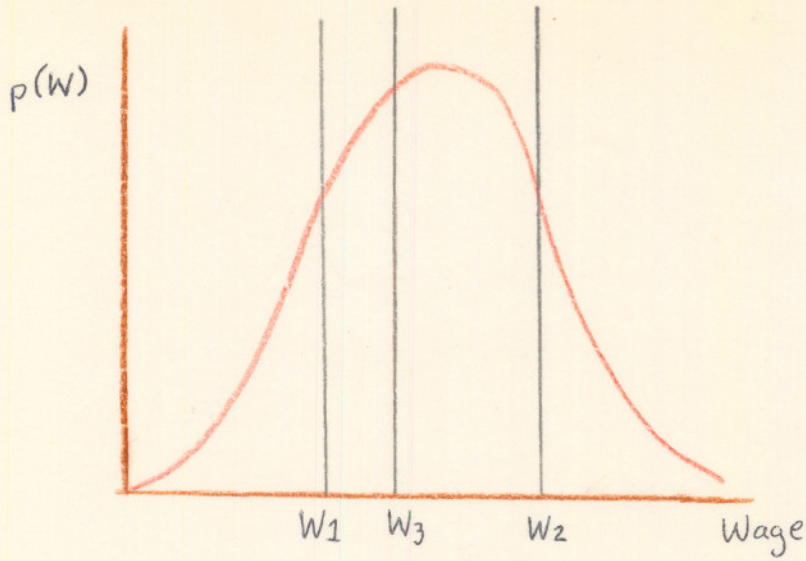


"First Wage Offer"
graph 2

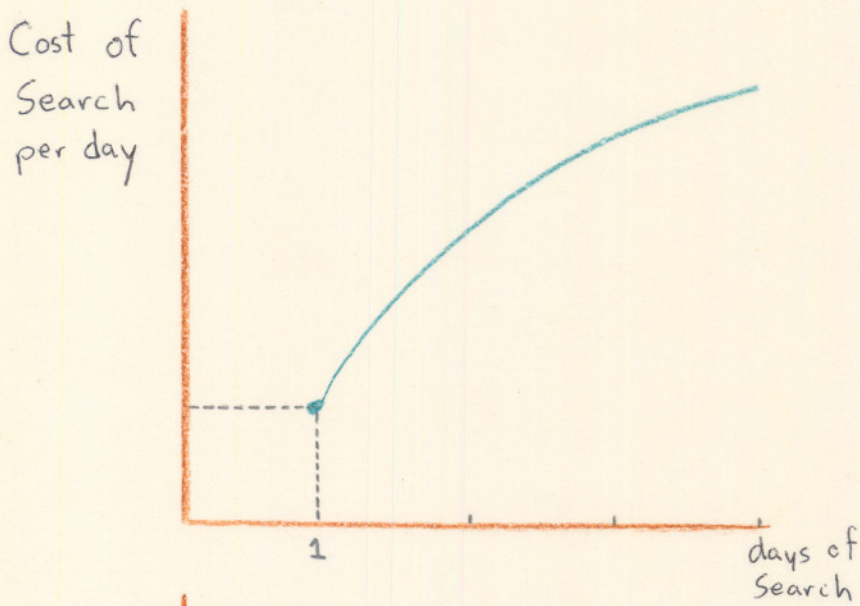
search, the cost will increase to include the opportunity cost of not accepting the W_1 offer. Therefore the algebraic representation will become: Cost of continued search on day 2 = $C + (W_1 - g)$.

Let's assume day two generates an offer at some wage W_2 , as shown on graph number 3. Taking into account that the cost of search includes the opportunity cost of lost income, the cost of search will depend upon the previous "best offer so far." For simplicity, let this "best offer" equal " W_b ." Because in the given example $W_2 > W_1$, $W_2 = W_b$. As time increases, it becomes likely that the "best offer so far" will increase but at a decreasing rate because most jobs will be within the median range of the distribution. This increasing cost of search, given algebraically as $C + (W_b - g)$, is illustrated on graph number 4.

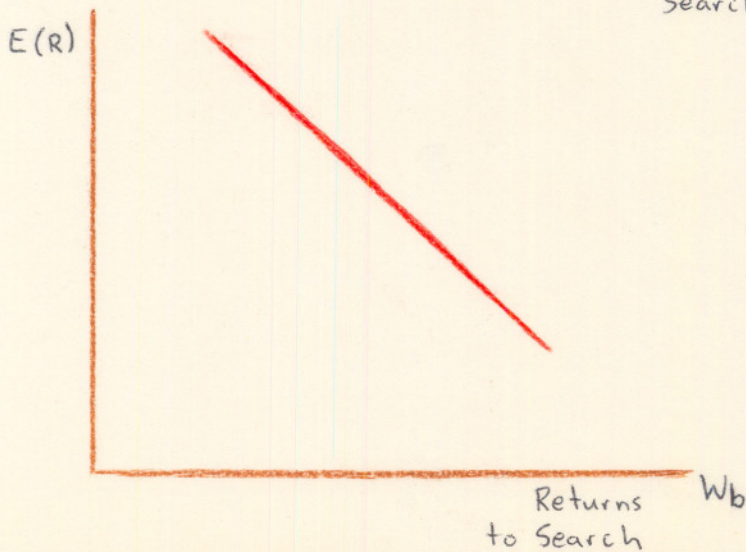
"The expected return from search" ($E(R)$) dwindles as W_b grows higher, until at some high level of W_b , the probable return from search approaches zero. As long as $E(R) > C + W_b - g$, the individual will continue to search. At some point, there will be a W_b such that the cost of continued search is set equal to the expected rate of return. At that wage level, W_b becomes the rate at which the unemployed worker would accept the job offer. This specific W_b is known as the "reservation wage."



"Successive Job Offers"
graph 3



"Increasing Cost of Search"
graph 4



"Returns from Search"
graph 5