Work and Leisure: A History of Ideas

Yoram Weiss, Tel Aviv University

I. Introduction

This article reexamines an old question: what is work and why do we do it? A straightforward "economic" answer is that work is any time activity for which we receive a positive wage, but this raised the question of which activities command a positive wage. Now the answer depends on market level considerations such as the available technology and the joint distribution of preferences and skills in the population. Unfortunately, these fundamentals are not directly observed, and we must infer them somehow from observations on wages and individual choices. This circular logic leaves a lot of room for speculation and arbitrary definitions.

In this article, I survey this speculative territory and examine the views of classical economists (and philosophers) on work, its pain, and its rewards. I also discuss the impact of the economic and social context in which work is performed on individual attitudes toward work.

My main objective is to review labor economics from the broader perspective of outsiders, including those who established our field. Labor is a familiar activity that most humans have experienced and many have thought about. The ideas and questions raised here are intended to stimulate current professional economists to step back and rethink concepts.

This article was delivered as the presidential address at the 2008 Society of Labor Economists meeting in New York. I wish to thank June Flanders, Daniel Hamermesh, Joel Mokyr, John Pencavel, and Chris Taber for their valuable comments. Contact the author at weiss@post.tau.ac.il.

1 The books by Appelbaum (1992) and Thomas (1999) are valuable sources for this topic.
that are often taken for granted. For this reason, I bring many quotations in their original form and language. I hope that they will encourage the reader to look at the original materials.

II. Definition of Work

"For what has a man for all his labour, and the thriving of his heart, in which he labours under the sun? Man has no better thing under the sun, than to eat and to drink, and be merry: for that shall accompany him in his labours during the days of his life, which God gives him under the sun" (Ecclesiastes 2:22, 8:15).

Thus, life is finite, and much of it is spent in labor. This element of the human condition has been recognized by philosophers and social observers (Arendt 1959). The Bible considered work to be an undesirable but necessary condition for survival: "In the sweat of thy face shalt thou eat bread, till thou return to the ground" (Genesis 3:19). However, when technological conditions allow humans to rise above subsistence level, the problem of choice between work and other uses of time is faced, at least by some members of society. According to Aristotle, "The whole of life is further divided into two parts, business and leisure, war and peace, and of these two some aim at what is necessary and useful, and some at what is honorable. . . . There must be war for the sake of peace, business for the sake of leisure, things useful and necessary for the sake of things honorable" (Aristotle 350 BCE, bk. 7, pt. 14). Living as a free citizen in a society employing slaves, Aristotle viewed work as a means to obtain leisure, that is, time for contemplation and citizen's duties later in life.

In modern societies, leisure has become an option for a large segment of the population. The leisure activities have changed as well. As noted by Smith (1776, 100-101): "Hunting and fishing, the most important employments of mankind in the rude state of society, become in its advanced state their most agreeable amusements, and they pursue for pleasure what they once followed from necessity. In the advanced state of society, therefore, they are all very poor people who follow as a trade, what other people pursue as a pastime." The question then is how one can distinguish leisure from work. Jevons (1871, 168) defined labor as "any painful exertion of mind or body undergone partly or wholly with a view to future good." Applying the (newly discovered) principle of diminishing marginal utility (and increasing marginal disutility), Jevons shifted attention from work or leisure as such to the marginal units of each activity. A person stops working only when the marginal disutility of work exceeds the marginal utility of the consumption derived from additional work, which is presumed positive when the wage is positive. Hence, operationally, any time activity that a person sells at a positive wage is labor. However, important choices in the labor market are such that the amount of hours is part of the job or occupation requirement, and the worker's problem is what job (occupation) to choose. For such discrete choices, the marginal principle does not apply, and the question becomes which type of jobs command a positive wage.

It has been recognized by classical economists that a basic feature of the occupational choice problem is that work services cannot be separated from their owner (the worker), and therefore wages depend on the specific conditions under which work is performed. As stated by Marshall (1920, 471), "It matters nothing to the seller of bricks whether they are to be used in building a palace or a sewer: but it matters a great deal to the seller of labour, who undertakes to perform a task of given difficulty, by nearly half for typical workers. Ironically, those in the top decile of the income distribution have not shared much in this gain of leisure since the highly paid professionals and businessmen who populate the top decile work closer to the 19th century standard of 3,200 hours per year than the current working-class standard of about 1,800 hours.

This was a fundamental step leading to a simple characterization of the "labor supply function" that is still used today. The amount of work as a function of the wage per unit of work and per period nonwage income is derived directly from the first-order condition for utility maximization that requires equality between the marginal disutility of work and the marginal utility of the consumption derived from additional work. An increase in the wage may reduce the chosen amount of work if there is a sufficiently strong "income effect." Such outcome is rarely observed in cross-section data but is consistent with the simultaneous rise of wages and leisure over time (Lewis 1957; Blundell and Macurdy 1999).

The same principle applies if the expected reward is a payment in kind or profits from self-employment. Jevons (1871, 168) noted that leisure activities, such as a game of cricket, may well involve effort, but "when we exert ourselves for the sole amusement of the moment, there is but one rule needed, namely, to stop when we feel inclined—when the pleasure no longer equals the pain."
whether or not the place in which it is to be done is a wholesome and a pleasant one, and whether or not his associates will be such as he cares to have. The more disagreeable the incidents of an occupation, the higher of course are the wages required to attract people into it. Occupations or jobs can be viewed as multidimensional packages, characterized by wages and work conditions, including required hours. Equilibrium conditions determine all these dimensions simultaneously. A salient feature of this equilibrium is the coexistence of unattractive-high-wage jobs and attractive-low-wage jobs. This variety arises because workers differ in their preferences and employers differ in the costs of supplying amenities. The equilibrium configurations of wages and work conditions depend on the distribution of individual preferences for amenities and the distribution of the costs to produce these amenities (Rosen 1986).

The idea of compensating wage differences was first introduced by Adam Smith, who extended it to investments in schooling and training. In this case, it is not only the amenities of the job that matter but also the costs that the worker must bear in order to qualify for the job. These are often substantial investments made under conditions of uncertainty, which workers would not undertake unless they expect potential employers to pay them a higher wage.

When any expensive machine is erected, the extraordinary work to be performed by it before it is worn out, it must be expected, will replace the capital laid out upon it, with at least the ordinary profits. A man educated at the expense of much labour and time to any of those employments which require extraordinary dexterity and skill, may be compared to one of those expensive machines. The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital. It must do this too in a reasonable time, regard being had to the very uncertain duration of human life, in the same manner as to the more certain duration of the machine. (Smith 1776, 101)

Because of the discrete nature of occupational choice, it is common that workers with different preferences make the same choice. This mixing (or bunching) of types makes it difficult to recover the full distribution of preferences in the population, based on market data alone (Heckman, Matzkin, and Nesheim 2005). In particular, it may be impossible to separate those who like to work in a particular occupation from those who

---

9 A simple general hypothesis is hard to test empirically because of confounding factors such as unobserved workers’ productivity. Duncan and Holmlund (1983) partially correct for this bias by using panel data and obtain mixed results; dangerous and stressful working conditions are associated with a compensating wage differential. Constrained work hours and hard physical work, on the other hand, do not have consistent effects on wages.

---

20 A case in which the equilibrium wage for scholars was practically zero is described by Smith (1776, 132); “Before the invention of the art of printing, a scholar and a beggar seem to have been terms very nearly synonymous. The different governors of the universities before that time appear to have often granted licences to their scholars to beg.” In a recent study, Stern (2004) estimates that scientists are willing to take a 20% wage cut to work as researchers.
Hume describes here mental and physiological constraints that generate relatively short and regular cycles that repeat many times. In contrast, processes such as the accumulation of human capital vibrate throughout life, because schooling or work experience acquired early in life can augment wages throughout the working life (subject to some depreciation and obsolescence). The modern theory of human capital, developed by Mincer (1958), Becker (1965), and Ben Porath (1967), analyzes these long-term relationships. Assuming certainty and maximization of lifetime income, it provides two important insights: (1) The current wage generally falls short of the full reward (in terms of lifetime income) that workers receive or expect to receive for their current work. (2) Investments in human capital, and consequently wage growth, decline over the life cycle. The discrepancy between observed wages and potential wages and their change over the life cycle makes it hard to recover preferences from wage data, especially when workers care about how much they work and what type of work they perform, because indirectly wages depend on preferences. The problem is made even more difficult when we allow for uncertainty and individual differences in ability. As summarized by Marshall (1920, 480), "There is some interest in the inquiry how much of the income of successful men is due to chance, to opportunity; how much to the good start that they have had in life; how much is profits on the capital invested in their special training, how much is the reward of exceptionally hard work; and how much remains as a producer's surplus or rent resulting from the possession of rare natural gifts?"

Another difficulty in recovering preferences for work is that not all work is sold in a market, as in the case of household work performed by husbands and wives. Becker (1965) put forward a generalized approach of consumption and time use in which final consumption is produced within the household by intermediate goods purchased in the market and personal time withdrawn from market work. Then, upon a wage increase, goods that require a relatively large time input (such as child care) will be substituted by goods with lower time intensity and, thereby, household time is released for market work. In this manner, one obtains a standard labor supply for market work. Becker (1965, 504) concludes that "although the social philosopher might have to define precisely the concept of leisure, the economist can reach all his traditional results, as well as many more, without introducing it at all." Nevertheless, researchers who

---

10 Becker's framework allows one to conceptualize the distinct roles of technological advance in home production and in industrial production in explaining the observed changes in allocation of time. De Vries (1994, 255–56) applied this framework to identify an "industrious revolution," characterized by an increased production of marketable goods within households, which "preceded and prepared the way for the Industrial Revolution." However, Pollak and Wachter (1975)
sional essay to this problem and provides the following definition: "The wealth of a country consists of the sum total of the permanent sources of enjoyment, whether material or immaterial, contained in it: and labour or expenditure which tends to augment or to keep up these permanent sources should, we conceive, be termed productive." Mill considers acquisition of skills productive, because "skills possess exchangeable value and are capable of being stored and accumulated" but, similar to Smith, Mill considers a concert performance as unproductive, because it is "performed immediately for the spectators' enjoyment, and without leaving, as a consequence of the performance, any permanent result possessing exchangeable value." The emphasis on durability in this context seems somewhat misplaced, as permanent gains from trade can arise from exchanging services. This was recognized by Marx (1867, 644), who defines productive work as any creation of surplus value (relative to the cost of maintaining the worker's capacity to work). "The only worker who is productive is one who produces surplus-value for the capitalist, or in other words contributes towards the self-valorization of capital. If we may take an example from outside the sphere of production of material objects, a schoolmaster is a productive labourer, when, in addition to belabouring the heads of his pupils, he works himself into the ground to enrich the owner of the school. That the latter has laid out his capital in a teaching factory, instead of in a sausage factory, does not alter the relation."

A modern variant of nonproductive work is "rent seeking" (Tullock 1967). Consistent with the classical view, such activities are unproductive in the sense of merely transferring wealth (income) across members of society. However, the important added element is that such transfers can be socially costly, because individuals spend effort to win the contest for existing sources of income. In contrast, to the classical writers, the literature on rent seeking is more explicit about the role of property rights, externalities, and market failures. Baumol (1990) and Murphy, Shleifer, and Vishny (1991) discuss the potential inefficiencies that arise when talented individuals are engaged in rent seeking rather than in the creation of new knowledge or products. Murphy et al. (1991) estimate a cross-country regression showing that countries with a higher college enrollment in engineering and a lower college enrollment in law have higher rate of economic growth. In general, however, it is difficult to distinguish between productive and nonproductive labor, mainly because the outcomes depend on the circumstances in which a particular work activity is performed and the reward system that is in place.\footnote{As Marshall (1920, 56) notes, "The attempt to draw a hard and fast line of distinction where there is no real discontinuity in nature has perhaps never led to more quaint results than in the rigid definitions which have been sometimes given of this term 'productive.' Some of them for instance lead to the conclusion that a singer in an opera is unproductive, that the printer of the tickets of admission to the opera is productive; while the usher who shows people to their places is unproductive, unless he happens to sell programmes, and then he is productive."}
According to Marx (1867, 271), such contracts must be of short duration so that the worker “may manage both to alienate his labor power and to avoid renouncing his right of ownership over it.” Marx argued that the workers are at a permanent disadvantage because technological advance, manifested in new machinery and increased division of labor, generates excess supply of workers (a “reserve army of labor”) who compete for jobs. Thus, irrespective of technological changes, wages are kept at a “subsistence level,” which is the minimum required for the worker to maintain his labor power.

In addition to the determination of wages, the question arises how technical advance and competition affect working conditions. Marx (1867, 549) describes the dehumanizing impact of the factory system: “The technical subordination of the workman to the uniform motion of the instruments of labour, and the peculiar composition of the body of workpeople, consisting as it does of individuals of both sexes and of all ages, give rise to a barrack discipline, which is elaborated into a complete system in the factory, and which fully develops the before mentioned labour of overlooking, thereby dividing the workpeople into operatives and overlookers, into private soldiers and sergeants of an industrial army.” A similar, more recent, example is the assembly line for car production introduced by Henry Ford. Workers were reduced to a very basic, completely repetitive, work that is paced by the motion of the assembly line. Ford offered higher wages and shorter hours to compensate the workers for these dreary work conditions and enabled Ford to buy industrial peace at a time when unionism was growing and the new technology was very vulnerable to collective action. However, higher wages were also associated with increased selection and extensive monitoring of the workers at the factory as well as at home, by special inspectors from the “sociological department” (Raff and Summers 1987).

Clearly, technology can also improve working conditions by creating a safer and more comfortable working environment. With the aid of computers, humans can perhaps regain their control of machines. There seems to be some shift toward a more holistic and less specialized method of organization in which workers can contribute more to the design and development of new products (Lindbeck and Snower 2000). Particularly challenging was Keynes’s (1930, 369) prediction that technology can dispense with most work and that the real concern is whether mankind will learn to cope with the coming abundance of leisure. He cautioned that “there is no country and no people who can look forward to the age of leisure without a dread. For we have been trained too long to strive and not to enjoy.” Indeed, over the last two centuries men in developed countries have reduced their work substantially, especially the unskilled (see Costa 1998). When measured against an expected life time of 85 years and a potential work life of 70 years, paid work constitutes less than 20% of the available time (Zilibotti 2006).

Self-employment is one way to avoid control by others. Surveys conducted in several countries show that self-employed workers report a higher job satisfaction than regular employees (Benz and Frey 2004). This holds despite the longer hours of the self-employed and their lower wage, compared to employees. Given these gaps, it is not surprising that some workers hold two jobs, one which they enjoy, the other to support themselves. In his diary from 1911, Franz Kafka describes this tension as follows:

My happiness, my abilities and any possibility of using them have always lain in literature... Currently I can’t devote myself entirely to these literary pursuits, as I should, and for various reasons. Apart from my family situation, I couldn’t live from literature alone because of the slow development of my work and its particular character; in addition, my health and my character prevent me from devoting myself to a life that is uncertain at best. So I have become an office worker at a social insurance institute. Now these two professions could never tolerate one another and accept a shared fortune. The least good fortune in one is a great misfortune in the other. This back-and-forth is getting steadily worse. In the office I fulfill my duties outwardly, but not my inner duties, and each unsatisfied inner duty turns into an unhappiness which never stirs out of me. (Kafka 1988, 48-51)

It should be noted that self-employment has declined sharply over the last century, together with the decline of agriculture. In the United States, in 2003, only about 7% of all workers were self-employed. These self-employed workers tended to be male, elderly, and at the two extreme ends of the educational spectrum, that is, with less than a high school degree or with an advanced degree.

V. Work and the Family

Throughout history, there has been a marked sexual division of labor, whereby women work mainly at home and men outside. As described by Xenophon (431–355 BCE):

God made provision from the first by shaping, as it seems to me, the woman’s nature for indoor and the man’s for outdoor occupations. Man’s body and soul he furnished with a greater capacity for enduring heat and cold, way-faring and military marches; or, to repeat, he laid upon his shoulders the outdoor works. While in creating the body of woman with less capacity for

12 Similarly, Hamermesh, Myers, and Pocock (2008), report that for the average American, aged 15+, market work constituted 220 minutes on a representative day in 2003–4, about 15%. 13 This is reminiscent of the tension between teaching and research faced by some university professors.
these things, God would seem to have imposed on her the indoor works; and knowing that he had implanted in the woman and imposed upon her the nurture of newborn babies, he endowed her with a larger share of affection for the newborn child than he bestowed upon man. And since he imposed on woman the guardianship of the things imported from without, God, in his wisdom, perceiving that a fearful spirit was no detriment to guardianship, endowed the woman with a larger measure of timidity than he bestowed on man. Knowing further that he to whom the outdoor works belonged would need to defend them against malign attack, he endowed the man in turn with a larger share of courage. And for the very reason that their natures are not alike adapted to like ends, they stand in greater need of one another; and the married couple is made more useful to itself, the one fulfilling what the other lacks. (Xenophon 431–355 BCE, chap. 7, 31)  

Perhaps the most striking feature of modern labor markets is the contrasting trends of male and female work. While men have reduced their market work, women have increased it, and work patterns of men and women have become more similar. The entry of women into the labor market was partially in exchange for reduced work at home. The total leisure of men and women remained equal, and both men and women have increased their leisure in a similar manner (Aguirar and Hurst 2007; Burda, Hamermesh, and Wei 2008). These changes in labor supply have been associated with higher investments in schooling by women, who toward the end of the twentieth century have become slightly more educated than men, with far-reaching implications for husbands, wives, and their children.  

Women who exchange work at home by work in the market are willing to enter the labor market even if they receive a lower wage than men, because paid work for them is a source of economic independence. As noted by Mill (1848, bk. 2, chap. 14, par. 14), “No argument can be hence derived for the exclusion of women from the liberty of competing in the labour market: since, even when no more is earned by the labour of a man and a woman than would have been earned by the man alone, the

12 Xenoph on also mentions the different sex roles in earning and spending family income. “My belief is that a good wife, being as she is the partner in a common estate, must need be her husband’s counterpoise and counterpart for good; since, if it is through the transactions of the husband, as a rule, that goods of all sorts find their way into the house, yet it is by means of the wife’s economy and thrift that the greater part of the expenditure is checked” (Xenophon 431–355 BCE, chap. 3, 15).

There is extensive research that tries to sort out the roles of technological advance and changes in norms that have made this revolution possible (Greenwood, Seshadri, and Yorukoglu 2005; Fernandez 2007). Mulligan and Rubinstein (2008) emphasize the role of higher rewards for ability (reflected in the general increase in wage inequality) in drawing married women of high ability into the labor market.

advantage to the woman of not depending on a master for subsistence may be more than an equivalent.” According to Charlotte Gilman (1899), one indication of the economic dependence of wives on their husbands is that wives do not receive a proper “wage” for the work that they perform in the household; rather their standard of living depends on the income of their husband. Recent work on job and life satisfaction indeed shows that, despite their lower pay and lower rate of promotion, women are more satisfied with their jobs than men (Clark 1997). It is also found that male satisfaction rises when men’s spouses work full time (Booth and van Ours 2007), which appears to be consistent with the maxim that one cannot be happier than his spouse.

The work choice is much more complex when viewed from the perspective of the family. The interplay between cooperation and conflict of husband and wife determines who works and in what role, as well as the division of their joint income. There is a new strand of “collective” models of labor supply that address this problem (Chiappori 1992). An interesting feature of such models is that conditions in the marriage market, such as the prospects of divorce and remarriage, have an impact on work and schooling choices. Specifically, a higher divorce rate may induce women to invest more in schooling and work more in the market during marriage, as a protection against the risk of remaining single with a child and little support from the ex-husband (Johnson and Skinner 1986; Chiappori, Fortin, and Lacroix 2002).

VI. Work and Social Concerns

Work and leisure are often part of a group behavior in the sense that the willingness of each person to exert effort or to consume leisure depends on the choices of others in some reference group. There are several types of interactions that can lead to collective behavior. Some of these interactions are technological, such as complementarity and increasing returns. For instance, the possibility of sharing public goods and of exchanging information leads individuals to congregate at the same stadium or to work during the same hours of the day. Other interactions are social, resulting from preferences and attitudes toward others, such as fairness,
status, and reciprocity. Social interactions can arise at different levels of organization, such as firms or professions. As noted by Hicks (1963, 317), a precondition for social interaction within firms is "that employment should be regular, i.e., noncasual, so that there is a presumption that the relationship between the employer and at least a major part of his employees will be a continuing relation." He adds that under such conditions, "the purely economic correspondence between the wage paid to a particular worker and his value to the employer is not a sufficient condition for efficiency; it is also necessary that there should not be strong feeling of injustice about the relative treatment of different employees (since this would diminish the efficiency of the team)." However, social concerns may or may not increase efficiency. For instance, when workers care about status and compare their incomes, a rat race may arise in which workers try to outdo each other by working harder and longer hours. Such races are inherently inefficient, because when all individuals exert more effort, there is little or no positional gain. Yet, each worker is willing to exert extra effort so as not to be left behind.

Social concerns appear to be particularly important in the professions. As noted by Smith (1776, 107), "To excel in any profession, in which few arrive at mediocrity, is the most decisive mark of what is called genius or superior talents. The public admiration which attends upon such distinguished abilities, makes always a part of their reward; a greater or smaller in proportion as it is higher or lower in degree. It makes a considerable part of that reward in the profession of physic; a still greater perhaps in that of law; in poetry and philosophy it makes almost the whole." A person’s profession is often an important social asset, yielding some respect and deference from members in society at large. However, the value of such assets depends on the average quality of all members of the same profession, which with free entry can deteriorate easily. Therefore, professions tend to restrict entry and regulate the training, hours of work, and wages. Enforcement is achieved by peer pressure and, in extreme cases, exclusion from the group (e.g., denial of license). In parallel to social group norms voluntarily based on their perception of their identity (Akerlof and Kranton 2005). In this regard, professions act as “status groups” that successfully claim social honor by virtue of their special style of life (Weber 1922a, 937).

Given that group membership is valuable, professional association can extract “taxes” in terms of volunteer work, such as editing professional journals, refereeing, and letters of recommendation. Although these “civic obligations” are time consuming, they are often done without pay. An interesting aspect of this state of affairs is the accumulation of time debts, that is, commitments to work that can hardly be accomplished in due time. It is often the case that the more prestigious and successful members accumulate more of these debts. A study by Harriett Zuckerman (1967, 400) of Nobel laureates finds a marked decline in productivity following the Nobel Prize, ascribing part of it to the rising demands on time. As one of the Laureates put it, “After not doing much work since the prize, I want to get rid of a lot of the honors and get back to work. But how do you do it? You have to discharge a certain number of obligations and fight off new ones. That is easier said than done.”

In the United States, over the year ending September 2006, about 30% of women and 23% of men did some volunteer work. The median number of annual hours among those who volunteered was about 50 for both sexes. Men and women tended to engage in different activities. Men who volunteered were most likely to engage in general labor (11.5%) or to coach, referee, or supervise sports teams (10.2%), while women volunteers were most likely to raise funds (12.5%) or tutor and teach (12.5%). Volunteers tend to be of working age (35-54), employed, married, and highly educated, showing that they are willing to contribute time even though their cost of time is high. Much of this volunteering is done in a social context, such as church, school, and community centers, and most volunteers reported that they were asked to volunteer rather than initiating it (Freeman 1997). All these features suggest that volunteer work falls somewhere between work and leisure. The similarity to leisure is indicated by the positive income effect and the discretionary element in volunteering. The similarity to work is that volunteers perform work for which others are paid, indicating some investment of effort. The main point, however, is that individuals are willing to perform work even without pay. An interesting idea in this context is that monetary returns or other explicit rewards for such work may “crowd out” the intrinsic motive to volunteer (Frey and Goette 1999; Fehr and Falk 2002).

Social norms often influence choices of work and leisure. According to the Jewish and Christian religions, work is to some extent a moral obligation. Two ethical considerations are invoked in this context; a person should not rely on support from others (who are obliged to assist him), and idleness of any sort weakens the willingness to perform religious obligations. Thus, the Talmud asserts that a person should even hire himself out to do work that is strange to him and beneath his dignity rather than be dependent on people for charity. Similarly, Paul’s second letter to the Thessalonians (3:8-9) says, “Neither did we eat bread from anyone’s hand without paying for it, but in labor and travail worked night and day, that we might not burden any of you; not because we don’t have the right, but to make ourselves an example to you, that you should...
imitate us." The recognition of the moral hazard problem inherent in any charity system is quite apparent from these citations. Also, as stated by Raban Gamliel, "Great is study of the Torah when combined with a worldly occupation, for toil in them both puts sin out of mind. All study of the Torah which is not supplemented by work is destined to prove futile and causes sin" (Pirke Avot 2:2). These ideas reappear in the discussion of the connections between the Protestant ethic and capitalism. According to Weber (1922b, 221), the notions that a man proves himself exclusively in his vocational work and that idleness of a person capable of work was inevitably his own fault were central themes in the Calvinist and Puritan doctrines, which together with the legitimating of credit and profits opened the door to a capitalistic society.

Discussions of social norms toward work and leisure have reemerged recently as a possible explanation for the higher supply of labor in the United States as compared to Europe. One idea is that complementarity of leisure activities, such as time spent with family in holidays, have generated a social multiplier effect that put European countries at a different equilibrium that is reflected in fewer yearly hours of work and more vacations than in the United States (Alesina, Glaeser, and Sacerdote 2005). As usual with cross-country comparisons, it is hard to disentangle the cultural differences from other factors such as the stronger incentives to work in the United States associated with higher wage dispersion and lower taxes (Bell and Freeman 2001; Prescott 2004).

VII. Conclusion

Having described the various features of work and leisure and the difficulties of recovering preferences for these features from market data, a logical conclusion would be to pay more attention to direct methods such as opinion surveys and laboratory experiments. One may also ask why we care, as long as we can identify robust patterns of behavior in work choices. One answer is that individual preferences are an important input in policy design. For example, an issue that arises in designing welfare to work policies is how to treat handicapped individuals; should they receive a regular living allowance or should they, instead, receive conditional payments with incentives to work? The point is that it is very costly to find a job for handicapped workers but, at the same time, the value of work for them may be exceptionally high. Given the large heterogeneity in preferences and individual circumstances it is naïve to expect that preferences for work can be "found" by some direct methods. However, we can cater better to the needs of special groups by offering a menu of alternative programs and letting the individuals choose the one that suits them most. One recent example is the "ticket for work" program that was introduced by the U.S. social security administration in 1999.19

Modern labor economists have developed tools to measure the impact of training and work programs that provide incentives to augment human capital and increase market work. However, finding the "causal" effects of such programs on behavior is only a first step in understanding the full welfare implications of such policies. For instance, what is the welfare gain when a married mother with children joins the labor force? Most likely, her work choice bears on the welfare of her children and the work choices of her husband (if she is married) and possibly her ex-husband (if she is divorced). Such interactions can go beyond the bounds of a single family and affect fertility, marriage, and divorce in society at large. Labor economics has recently started to grapple with the complex issues of family behavior and its welfare evaluations, but a lot remains to be done.

References


19The ticket for work is an employment program for people with disabilities who are interested in going to work. It provides disability beneficiaries with a ticket they may use to obtain the services and jobs they need from a universe of organizations called Employment Networks.
Earnings Functions When Wages and Prices Vary by Location

Dan Black, University of Chicago and NORC

Natalia Kolesnikova, Federal Reserve Bank of St. Louis

Lowell Taylor, Carnegie Mellon University

Economists generally assume, implicitly, that "the return to schooling" is invariant across local labor markets. We demonstrate that this outcome pertains if and only if preferences are homothetic—a special case that seems unlikely. Our theory predicts that returns to education will instead be relatively low in expensive high-amenity locations. Our analysis of U.S. data provides support for this contention: returns to college are especially low in such cities as San Francisco and Seattle. Our findings call into question standard empirical exercises in labor economics that treat the returns to education as a single parameter.

I. Introduction

The development of human capital theory and the application of this theory to the estimation of earnings functions is a landmark contribution in applied economics. The central logic of human capital theory, as set out in the classic works of Becker (1964, 1967) and Mincer (1974) and portions of the empirical work in this essay were conducted while we were Census Bureau research associates at the Carnegie Mellon Research Data Center. Research results and conclusions expressed are ours and do not indicate concurrence by the Bureau of the Census. This essay has been screened to ensure that no confidential data are revealed. The views expressed are ours and do not necessarily reflect official positions of the Federal Reserve Bank of St. Louis, the

© 2009 by The University of Chicago. All rights reserved.
0734-306X/2009/2701-0001$10.00

21