

ECONOMIC THEORY, APPLICATIONS AND ISSUES

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An Overview and Assessment of the Economics of Leisure

Clem Tisdell

Note

*This is a draft of the introductory chapter for *The Economics of Leisure* which is being published by Edward Elgar Publishing Pty Ltd, Cheltenham, UK, and Northampton, Massachusetts, by whom all rights are reserved. It will appear in *The International Library of Critical Writings in Economics* series, in two volumes.*

The draft Table of Contents for these volumes are set out in the Appendix to this paper. Feedback is welcome

Introduction

The economics of leisure, and the closely associated subject of the economics of recreation, are complex partly because definitions of these concepts rely on subjective assessments. The *Concise Oxford Dictionary* (Fowler and Fowler, 1951) infers that ‘leisure’ relates to opportunities provided by free time or time at one’s disposal. *The Macquarie Dictionary* describes leisure as ‘the condition of having one’s time free from the demands of work or duty’; ‘free or unoccupied time’ (Delbridge, 1981). Recreation is usually confined to leisure-time and is described by *The Macquarie Dictionary* as ‘refreshment by means of some pastime, agreeable exercise, or the like’ involving ‘relaxation and enjoyment, as after work’ or a ‘pastime, diversion, exercise, or other resource affording relaxation and enjoyment’ (Delbridge, 1981).

While these explanations of the terms leisure and recreation are useful, they may suggest that these concepts are more precise than they really are. For example, in some situations it is difficult to distinguish between work and leisure activities (cf. O’Brien, Volume I, Contribution 4). Artists and creative persons may, for instance, consider much of their work activity to be akin to leisure. In some workplace situations, leisure activities, such as chatting, may be combined with work and access to gymnasias may be freely available to staff. Furthermore, the degree of freedom of employees in using work time varies greatly between occupations and employers. The routine of some workers is closely controlled but

this is unlikely to be practical, or profitable, in cases where employees must exercise considerable discretion or judgement, and/or display creativity. While the time of the latter group of employees in their workplace is not entirely free, much of their work is akin to a leisure activity.

Again, it is doubtful whether all time outside formal work can be regarded as leisure-time. There may, for example, be social obligations on the use of this time, and those obligations may reduce the amount of free time available to the individual. For example, there are social obligations on parents to take care of their children by spending 'free' time with them, there may also be other family obligations and, in many societies, there are social pressures to participate in community activities such as religious observances.

Furthermore, a part of non-work time must be allocated to meeting human needs such as eating, drinking and shopping. The fulfilment of these needs is not discretionary. However, eating, drinking and sex may also become leisure activities or forms of recreation. Again, several work activities may be undertaken by individuals within or around the home. Some, such as cleaning, are socially necessary and are normally not regarded as leisure activities. Whether home cooking and gardening are considered to be work, leisure activities or forms of recreation by individuals seem to depend on the circumstances.

The above indicates that the distinction between work and leisure time, and between work activities and leisure activities is fuzzy. Also what is and what is not recreational activity is to some extent subjective. Nevertheless, there is little doubt that the amount of non-work time and leisure-time available to most individuals in higher income countries in modern times has risen compared to that in the 19th century. As economic growth occurs in low income countries and their per capita income levels rise after a time, the amount of non-work time available to those who are formally employed tends to rise. The length of the working week often falls and the amount of paid annual holidays usually rises. This has been occurring in China in recent times. Up to a point, the amount of free time available to individuals rises as per capita incomes increase. However, at higher income levels, the leisure-time available to most individuals may become stationary, or even increase for some employees as a result of increased market competitiveness and institutional changes.

This overview of the economics of leisure is presented as follows: the purpose and scope of this collection of writings is described and the rationale underlying the organisation of these writings is explained; then significant issues raised by items in this collection are outlined and assessed, and finally gaps in the literature dealing with the economics of leisure are identified and discussed.

Purpose of this Collection, its Scope, and the Arrangement of the Contributions

This book provides a comprehensive set of useful articles for reference purposes that address the economics of leisure and arranges these in a manner that assists the comprehension of the subject. The nature of the contribution of each article is highlighted in this overview which also helps to integrate the coverage of the collection. It provides an assessment of the current state of the available literature on the economics of leisure, identifies gaps in this literature, and highlights areas that are worthy of more research effort.

The scope of this collection has been constrained because there are already other collections in this series, the International Library of Critical Writings in Economics, that contain articles relating to the use of leisure time. These include *Cultural Economics* (Towse, 1997), *The Economics of Tourism* (Tisdell, 2000) and *The Economics of Sport* (Zimbalist, 2001). Therefore, articles dealing with leisure and the arts and culture, sports, and tourism have not been included in this collection. While a few articles in this book involve the economics of outdoor recreation in natural or semi-natural areas, only a limited number of this extensive available set have been selected for inclusion in this book in order to preserve balance. The available set of writings on the economics of outdoor recreation is so large it could become the basis of a future collection in its own right.

The contributions in this collection have been arranged in seven parts. In Volume I, the first part provides basic perspectives on factors that can influence the choices of individuals about their amount of leisure-time and the nature of their leisure activities. Part II focuses on detailed studies of the demand for leisure-time versus work that apply or extend neoclassical economics. Several of the writings in this part develop or apply Becker's (1965) theory of the allocation of time. Part III consists of economic studies that investigate the relationship between welfare and leisure.

In Volume II, Part I contains articles that mostly consider the impacts of taxes on work-leisure choices. However, some writings in this part also examine features of leisure and publicly supplied goods. Articles in Part II explore influences on demand for particular leisure activities. While most of these articles are based on economic approaches, a few are not, and are included for illustrative purposes. Some controversy exists about the nature of trends in the availability of leisure time as a function of economic growth and development, and this is apparent from contributions in Part III. Miscellaneous writings on leisure economics can be found in Part IV and include consideration of why some individuals voluntarily supply labour, the characteristics approach to leisure and work choices, leisure

preferences as an influence on international trade, and consequences of new technologies for the use of leisure-time. In addition, one contribution considers problems involved in measuring the value of leisure-time.

The nature of the writings included in this collection will now be outlined and discussed and the reasons for their inclusion will be highlighted. Coverage follows the order of their inclusion in this book. This overview is organised in sections corresponding to each of the parts of this book. A general discussion and assessment of the status of the economics of leisure will conclude this overview.

Basic Perspectives on the Economics of Leisure (Volume I, Part I)

Although most contributions to the economics of leisure have been based on neoclassical economics and its extensions, some heterodoxy exists in basic views about the economics of leisure. Contributions associated with Max Weber (1930) and Veblen (1931) which emphasise social and institutional features of leisure and work, contrast with approaches in neoclassical economics which are atomistic, usually individualistic in nature, and based on reductionism.

The contribution by Tawney (1930), reproduced in this book, provides a useful overview and a critical assessment of Weber (1930). In *The Protestant Ethic and the Spirit of Capitalism*, Max Weber emphasises the influence of social morality on the attitudes of individuals to work and leisure, and to economic behaviour generally. He attributes the rise of capitalism largely to the development of Protestantism with its emphasis on the Protestant work ethic promoting hard work and self discipline as a means to prosperity and personal fulfilment. According to Tawney (1930, pp.2-3), ‘Baptised in the bracing, if icy waters of Calvinist theology, the life of business, once regarded as perilous to the soul – *summe periculosa est emptionis et venditionis negotiatio* – acquires a new sanctity. Labour is not merely an economic means: it is a spiritual end’. Teaching and concepts in the Old Testament were used by Protestantism to support the desirability of work and the undesirability of idleness (Wikipedia, n.d). However, while there is little doubt that social morality helps shape individual attitudes to work and leisure, the relationships are more complex than envisaged by Weber, as is illustrated by Tawney (1930).

In *The Theory of the Leisure Class: An Economic Study of Institutions*, Veblen (1931) also emphasises the importance of social influences on leisure and work choices. However, he does not stress moral influences on work-leisure choices but rather the use of leisure as a means to obtain or retain social status, particularly by the rich. Veblen (1931, p.36), see

Volume I, Contribution 2, states that ‘In order to gain and to hold the esteem of men it is not sufficient merely to possess wealth or power. The wealth or power must be put in evidence, for esteem is awarded only on evidence’. Therefore, indulgence in conspicuous consumption and conspicuous leisure by the ruling class is seen as necessary for retention of their status. The ruling class, the leisure class, is seen as wanting to avoid work and as flaunting its wealth and available leisure-time. Thus, in Veblen’s view, the ruling class is not guided by the Protestant work ethic.

Rojek (see Volume I, Contribution 3), on the basis of a sample of the rich, finds that the rich today do not typically reject work, rather, many of the rich work longer hours than the average. Their behaviour accords more with what might be expected on the basis of the Protestant work ethic than with Veblen’s hypothesis. However, the rich are diverse and some may also exhibit attributes similar to those suggested by Veblen.

Features of Veblen’s emphasis on social influences on economic choices are particularly relevant to leisure economics. For example, demand for leisure commodities seems to be especially subject to social influences, such as bandwagon and snob effects, as well as Veblenesque price effects, that is, price-levels that assume social signalling significance (Leibenstein, 1950). Such factors may be more important today than Veblen’s hypothesis that the rich forego work to display conspicuous availability of leisure time.

Contribution 4, Volume I, by Gordon O’Brien provides a perspective on work and leisure in terms of psychological economics, and considers both social and individualistic factors as influences on the demand for leisure and the use of leisure time. After placing work and leisure in its historical context, O’Brien examines the concept of leisure, how the nature of work may affect leisure activities and choices, and considers important influences on leisure satisfaction. Particular attention is given to leisure and the unemployed and to leisure and retirement. The latter aspect is of growing importance in more developed countries experiencing rising proportions of retirees in their population. O’Brien notes that the ability of individuals to enjoy leisure time is frequently correlated with the nature of their work. The social role of retirees and the unemployed is also a major influence on their satisfaction from use of their leisure time. Those retirees who are able to use their skills (many of which may have been acquired in previous employment) in retirement in a social role generally appear to be more content than those who cannot.

O’Brien’s article demonstrates the importance of adopting a holistic, whole-of-life and life-cycle approach in assessing work and leisure options. He also considers the relationship between time patterns of work and satisfaction with leisure time, and provides a critical

assessment of economic theories of the allocation of time between work and leisure. These economic theories of time allocation have their origins in the seminal work of Becker (1965) reproduced here as Contribution 6, in Volume I.

Contribution 5 (Volume I) which deals with the supply curve of labour is an extract from *A Textbook of Economic Theory* by Stonier and Hague published in 1980. It provides a simple but useful overview of the approach of neoclassical economic theory to analysing the demand for leisure time and the supply of labour time. The theory is static in nature, based upon free choice by individuals, and involves the use of partial equilibrium analysis. It assumes, for example, that the price of leisure goods is constant. The theory raises the possibility of a backward bending supply curve of labour. At high wage or income levels, individuals may prefer to increase their leisure time and reduce work time whereas at lower levels of wages and income, the supply curve of labour is likely to be normal. With the passage of time, this supply curve may alter. For example, the wage level at which the curve bends backwards may rise.

Social influences are not explicitly considered in this theory and there is no specific allowance for institutional constraints on free choice by individuals. Nevertheless, social influences are likely to affect the form of the supply curve of labour, for example, the point of which it bends backwards, if it does. Social influences are reflected in variations in the supply curve of labour for different communities and societies. Furthermore, institutional changes, such as variation in the standard hours of work, may eventually adapt to changing individual preferences in society. The theory involving a backward bending supply curve of labour implies that a tax on employment will reduce the supply of labour if the supply of labour involves the positively sloped portion of the labour supply curve. However, labour supply increases if the negatively sloped portion of the supply curve is involved.

In 1965, Gary Becker extended the neoclassical theory of work and leisure choices to provide a more comprehensive theory than previously (see Contribution 6, Volume I). This theory includes consideration of the cost of time involved in consuming commodities, including those used during leisure, as well as the cost of their purchase. He also discusses productive consumption and productive leisure activities, that is, leisure activities that contribute to work productivity. Although he presents his model as one of choice by a *household*, he uses maximisation of a unitary utility function by the household to present his theory. Thus, he treats the household as if it is an individual. In that respect, his theory differs little from the traditional approach of neoclassical economics based on the individual rather than the family or household unit. Nevertheless, his article did raise awareness that

many decisions about work and leisure are made within a household consisting of several individuals, and that this changes the leisure-work choices of individuals (Becker, 1965, p.312). Becker's theory stimulated renewed interest in the economics of work and leisure and resulted in several extensions and applications of his theory, as can be seen from the writings included in Part II of Volume I.

Demand for Leisure-Time versus Work: Extensions and Applications of Neoclassical Economics (Part II, Volume I)

The writings in Part II, Volume I extend the neoclassical theory of leisure-time versus work to allow for institutional restrictions on work-time, the price of leisure goods, the time needed for housework, and to take account of time-allocation issues not specifically considered by Becker (1965). Life-cycle and dynamic aspects of leisure are also considered.

Important institutional restrictions on free leisure-work choices are considered by Moses in Contribution 7. Using traditional neoclassical microeconomic analysis and employing offer curves, he analyses economic situations in which individuals do not have free choice about the amount of hours they work. He considers circumstances where industries have standard hours of work. However, even when there are no legal standard hours of work in an industry, coordination requirements for the efficient management of businesses (particularly in modern times) may result in their imposition of standard specified hours of work by management. Many institutional factors constrain individuals in their trade-off of leisure-work time. Therefore, the general analysis of Moses remains relevant even in today's economies which are less regulated than when Moses published his article in 1962.

An interesting feature of his article is that its specific allowance for individual differences in preferences for leisure. It allows for greater heterogeneity of behaviour than is usual in neoclassical models. For simplicity, it distinguishes between leisure-preferrers and income-preferrers. It explores the welfare consequences of such heterogeneity and the social bargaining pressures that it generates, given institutional and related rigidities in the labour market.

The standard neoclassical economic theory of leisure-work trade-offs (See Contribution 5, Volume I) assumes the relative price of leisure commodities to be constant. Contribution 8 by Owen uses US data for the period 1901-61 to estimate the sources of the decline in the average hours of work of employees in the United States during that period. He finds that a quarter of the decline of hours of work of male employees in the private sector is associated with a decline in the price of marketed commodities used in recreation. He attributes the

remaining 75 percent of the decline to an increase in the real hourly wage rate; a result consistent with a backward-bending supply curve of labour. However, his analysis is focused on the individuals rather than the household.

Both Contribution 9 by Wales and Woodland and Contribution 10 by Gronau extend the neoclassical economic model to take account of the household and analyse influences on the allocation of time between leisure, housework and marketed work. They build on the foundations of Becker (1965) and they contributed to the development of what has been termed The New Home Economics. The theory of Wales and Woodland assumes a unitary household utility function. It supposes that this utility depends upon the amount of leisure-time available to the husband and the wife, and on their joint level of real income. Their model is closely related to that of Becker (1965). Gronau argues that although Becker's emphasis on the household as a decision-making unit is desirable, Becker's analysis gives insufficient attention to the production of commodities in the home as an alternative to working for money income in order to purchase these in the market. Gronau (1977) makes the radical assumption that home produced commodities have perfect market substitutes. This means that a household may either choose to produce such commodities at home or earn income to purchase these from the market. Thus leisure-time, home production, and the amount of time household members spend working in the market are interlinked.

However, Horrell (Contribution 11) argues that many of the economic substitution conclusions based on neoclassical household economics are not supported in practice. For example, she finds that the amount of time women spend on housework has not been significantly affected by whether they work or not, and that there is no substantial time-substitution between women's involvement in household production and their involvement in work-based production, as Gronau's theory predicts. Empirical evidence, according to Horrell, indicates that married women in the workforce have experienced very little reduction in their hours of household work, and that actual specialisation in work according to relative wages of wives and husbands (predicted by neoclassical theory) is not supported. Actually, however, the results of Wales and Woodland (1974) based on Becker's approach and Canadian empirical evidence are consistent with Horrell's observations. They find that the division of housework hours between husband and wife is responsive, but not significantly so in reality to the ratios of their wage rates. Furthermore, Wales and Woodland find that while total housework hours decline with increased income for families without children, this is not so for families with children.

The culturally determined roles of men and women apparently continue to play a major role in determining their relative contributions to housework, although, with greater participation of wives in the workforce, contributions of partners to household work have altered. Horrell points out that these variations are much more complex than neoclassical theory is able to detect. She finds that working wives in the UK tend to have less time for leisure than those not in market employment. On the other hand, their husbands have no significant change in their leisure time. In fact, their leisure time might increase slightly. In families with children, reduced parental time in child care, especially by wives, is one of the main effects of having working parents. Therefore, the cost and availability of child care is likely to be a major economic influence on whether mothers choose to work or not, and therefore on their availability of leisure. It is pertinent to note that whether or not wives have reduced leisure time when both partners work outside the home may be culturally influenced. Zuzanek et al. (Contribution 21) find the leisure-time of wives was not reduced in the Netherlands but was in Canada when both partners worked.

Contributions 12 and 13 involve empirical estimation of the demand for leisure time versus work within a neoclassical framework, and are in fact case studies. Dunn (Contribution 12) uses data from a cotton-mill town in the south-eastern United States and Atrostic's study (Contribution 13) depends on data about white US male twins born between 1917 and 1927 who were alive in 1974 and had both served in the military. Dunn finds that in his case the labour supply curve of workers is negatively sloped throughout, indicating that most workers have in mind a particular target or aspirational level of income. In Dunn's case, non-work time is a residual (time left free after achieving a target level of income), work-leisure preferences seem to be almost lexicographic, and neither the normally sloped labour supply curve nor the backward-bending one apply. More recently, Camerer et al. (1997) found that New York cab drivers, especially newer recruits, aimed for a target income each day, stopping work when their target was reached.

By contrast, Atrostic discovered that leisure time (non-work time in the market) declined with a higher wage rates but that the elasticities of response are quite low. He finds that non-pecuniary job characteristics also influence the demand for leisure. In practice, those in jobs with negative personal attributes are likely to have a greater demand for non-work time than those in occupations with positive personal work characteristics.

Foster and Stafford (Contribution 14) provide a comprehensive review of the economics of the allocation of time, as it had developed by the early 1990s following Becker's seminal contribution in 1965. One of the issues they highlight is forced non-working time allocations

for the elderly, a rising proportion of the populations of higher income countries. They point to US and Swedish data that indicate 'very high levels of intrinsic satisfaction associated with working for pay, relative to levels of intrinsic satisfaction associated with most leisure activities' (Foster and Stafford, 1991, p. 511). Leisure time is not always a desirable commodity, especially 'forced' free time, as pointed out by O'Brien in Contribution 4. Furthermore, Praag et al. (Contribution 26) found that, on average, working people in Germany tended to be happier with their job than their leisure. The demand for leisure and the use of leisure time is likely to be significantly influenced by job satisfaction (the non-pecuniary characteristics of a job) and social views on the desirability of work versus leisure. The latter include moral or ethical considerations, such as the strength of the Protestant work ethic.

Daniel (Contribution 15) examines the coordination and synchronisation of time use by partners. Differences are found to exist depending on the stage of couples in their life-cycle and whether or not they have small children. Therefore, this article explores the boundaries between the economics of leisure and work and the sociology of the family.

Writings 16, 17 and 18 consider inter-temporal and life-cycle aspects of leisure and work. Both the contribution by Ryder et al. (No.16) and that by Greenberg (No.17) take into account lost leisure-time involved in training programmes but only that of Ryder et al. introduces time as an explicit variable. Dorrrough in Contribution 18 finds, using Japanese data for the period 1946-1972, that with increased wealth, labour supply per Japanese worker declined very slowly in this period even though Japans' workforce participation rate rose. In the Japanese case, the responsiveness of increased leisure-time to economic growth appears to have been very low in this period. Japanese were not, it seems, inclined to forego much wealth to obtain more leisure.

Welfare and Leisure (Part III, Volume I)

For the individual, leisure-time is usually not one of idleness but a time during which commodities associated with leisure are consumed. However, commodities, as first pointed out by Becker (1965), take time to consume (or enjoy) and this may require effort. Because time is limited and effort in consuming is a cost, the process of consumption and use of leisure time involves economic choices. Therefore, this area is a subject for economic analysis. This theme, originally emphasised by Becker (1965), is developed by Linder in Contribution 19. One of his innovations is to argue that continuing economic growth and development could have negative welfare effects because it may result in individuals having

reduced time to enjoy consumption possibilities in their leisure-time relative to their range of available consumption possibilities. Thus economic abundance could lead to consumption overload and an increase in time-scarcity. Individuals might consume more intensely but enjoy what they consume less. Therefore, paradoxically, the quest for ever increasing income levels could eventually result in reduced economic welfare and what Linder termed a harried leisure class. Phelps, in Contribution 20, provides a critical and entertaining review of this thesis. He argues that individuals differ and not all will succumb as economic growth proceeds to consumption overload and time-scarcity in consumption.

Zuzanek et al. (Contribution 21) examine empirical evidence from Canada and the Netherlands which supports the thesis that, in recent decades, families have experienced increasing 'time-pressure' or 'time-squeeze'. This is also consistent with Horrell's findings for the UK (Contribution 11). However, as Zuzanek et al. point out, the change in time-pressure can vary historically, and the alteration in the balance of leisure-time between partners depends on the countries concerned. For example, Canadian wives experienced greater leisure-time deprivation than Dutch wives in the period of their study. The main reason for the increased time-squeeze is attributed by Zuzanek et al., on the basis of data from the 1970s to the 1990s, to the fact that the combined workloads of paid and unpaid work of partners has risen. This implies that while partners have access to more market commodities, they would have less time to enjoy these. In such circumstances, the welfare of the family may decline. Zuzanek et al. point out that increasing time-pressure can have serious physiological and socio-psychological side-effects. For example, it is likely to contribute to the prevalence of hypertension.

This raises a puzzle. Since families and individuals have some free choice (for example, in a family with partners, whether both partners work outside the home or not), why do they subject themselves to high levels of time-squeeze or increase their time-pressure. There may be several contributing factors. However, one important influence could be social emulation by individuals and their desire to maintain or improve their perceived (relative) social status; that is, at least to keep up with the Jones's. Displays of wealth act as an important marker of social status. Business advertising and promotion supports the use of this marker. In addition, business may foster unrealistic aspirations and expectations about the benefits of purchased commodities. As a result of social interaction, families could become enmeshed in a prisoners' dilemma type of trap. The welfare of all families may be lower than it need be due to the adverse consequences of their social interaction. This type of social externality is consistent with Veblen's notion of conspicuous consumption, including conspicuous

recreational consumption, but is not compatible with his thesis of increased leisure-time as a means of social status display.

Musgrave's article (Contribution 22) is concerned with a different theme, namely the application by John Rawls (1974) of the maximin principle to the distribution of income in order to achieve economic justice. Rawls has argued that income of all should be equal, unless inequality is to the benefit of all. Musgrave raises two main issues. First, individuals may be less risk adverse than assumed by Rawls. Secondly, Rawls' theory fails to make adequate allowance for the fact that individuals may have different leisure-work preferences. Musgrave points out that since a person's welfare is a function of both goods and leisure, the equalisation rule should include both components. He outlines several of the difficulties involved in doing this, as does Tisdell (1993, section 6.5). The application of Rawls' principle of justice to intergenerational equity and sustainable development is discussed in Tisdell (2005, Section 11.2).

Gramm, inspired to some extent by Maslow's hierarchy of needs (Maslow, 1968), adopts a framework (outlined in Writing 23) in which human well-being rises with the degree to which consumption needs, job satisfaction and leisure wants are satisfied. He expresses the view that, in modern economies, institutional arrangements restrict job satisfaction and result in less whole-of-life well being than is achievable. He believes that the ideal society would have 'uniformly high living standards with strong orientation to libera, humanistic values (democracy and intellect) and with a preponderance of the populace engaged in satisfying work and creative leisure'. He claims that the current capitalist economic systems fail to promote human well-being adequately because (a) they do not foster enough participation of workers in the management of business enterprises and (b) because they frequently fail to provide the young and the old with opportunities for meaningful work and constructive leisure.

Job satisfaction and workers' participation in enterprise management have also been of social concern to the Catholic Church since the early 1890s. They were explicitly addressed in Pope Leo XIII's encyclical *Rerum novarum*, 'On the Condition of the Worker'. As is clear from Wisman's contribution, these matters also concerned Pope Paul II.

In Contribution 24, Wisman provides a historical overview of changes in Christian attitudes to work, especially that of the Catholic Church. He places the Protestant ethic in a wider historical Christian context than usual and, in discussing Pope Paul II's view of work, considers the potentially positive impact of work and of job satisfaction on well-being. However, Pope Paul II felt that modern societies give inadequate attention to job satisfaction.

There is a need to take a more integrated view of the individual as an employee, as a consumer, and in his/her other roles or domains, in order to maximise human well-being. The contribution by van Praag et al. (Writing 26) which will be discussed after Kokoski's contribution (Writing 25) attempts to measure satisfaction in different human domains such as job satisfaction and leisure satisfaction.

Kokoski (Contribution 25) does not use domain analysis, but proposes household welfare indices that explicitly allow for the value of leisure time. She uses United States' cross-sectional data for 1972 and 1980 and finds that comparing 1980 results with those for 1972, the welfare of most households with families declined. This was mainly a result of partners jointly spending an increased amount of time in market employment and consequently having less leisure. This result accords with the general findings of several sociological studies outlined earlier in this section. She states that 'although the national average of hours per week worked [per worker] has declined over time, increase in labour force activity at the household level have accorded, decreasing household-level leisure consumption'.

Although commonly used as one of the indicators of the benefit of economic growth, weekly hours of market work per worker is an inadequate measure of household benefits from economic growth. In assessing human welfare, the satisfaction of individuals in all their domains or roles needs to be assessed jointly. Mainstream economics on the whole has not adopted such a multidimensional approach to assessing human welfare but has mostly concentrated on the level of consumption, and the utility obtained from this as the determinant of human welfare. Thus, its preoccupation has been with the lower levels of human needs in Maslow's hierarchy (Maslow, 1968). Excessive attention to consumption as the prime determinant of human well-being can result in policies that have negative impacts on human welfare.

Van Praag et al., in Contribution 26, take up the challenge of measuring human welfare in several domains. To do this, they used German panel data for 1992-1997 involving around 14,000 individuals in which respondents specify their level of satisfaction on a subjective scale for various domains of their life. The scale used ranges between zero and 10, where zero indicates totally unhappy and 10 signals totally happy. The domains which are assessed by van Praag et al. are determined by those available in the German Socioeconomic Panel surveys which provided the secondary data used. These domains include general satisfaction with life, job satisfaction, and leisure satisfaction. Although one must be cautious in interpreting their indices of satisfaction, the results suggest that, on average, Germans have a higher level of job satisfaction than leisure satisfaction. This, therefore, raises the question of

why. Why does leisure-time appear to be less rewarding for Germans on average than on-the-job time? Can this comparatively low level of gratification from leisure be rectified? Furthermore, in all life dimensions, East German workers were less satisfied than West German workers. They had, for example, less job satisfaction and less leisure satisfaction. Why? Van Praag et al. relate these satisfaction indices to various socioeconomic variables such as family structures, age of respondents and their level of education and reach some interesting conclusions.

While the approach of van Praag et al. is experimental and may be controversial, it is capable of highlighting patterns and problems in the whole-of-life well-being that might otherwise be overlooked. Thus, it provides a starting point for further investigation and for pinpointing domains in which social measures may be required to increase human well-being.

Public Economics, Taxation and Leisure (Part I, Volume II)

The public sector can influence leisure-work choices in a variety of ways such as by laws that affect working conditions, e.g., standard hours of work and holiday entitlements, by its supply or subsidisation of commodities used for recreation and leisure, and by its taxation policies. Contribution 7 in Volume I considered some of the consequences of standard hours of work. Contribution 1 in Volume II examines social issues involved in the pricing of access to resource-based recreation. The remainder of the writings in this part (Part I, Volume II) focus primarily on the consequences of taxation policies for work-leisure choices.

It is not uncommon for governments to supply and/or subsidise the supply of some commodities used for leisure or recreational purposes. These include public libraries, museums, art galleries, municipal parks and sporting facilities, and outdoor recreational areas such as national parks. Furthermore, major sporting events, such as the Olympic Games, festivals, such as music festivals, are often subsidised by governments. The reasons for this are varied. It may be done purely as a strategic means of vote gathering by the government or it may be motivated by idealism. The availability of some leisure commodities may be subsidised because they are viewed as merit goods. Some leisure commodities are regarded as socially desirable because they are seen as productive forms of leisure-use, morally 'wholesome', or culturally uplifting. Higher income groups and social reformers in Victorian times in Britain were often concerned that workers and the poorer members of society should have easy access socially desirable leisure commodities for their own good and for the good of society as a whole. In countries such as the United States, Canada and Australia, free access for all to outdoor natural resources, such as protected areas, was widely seen as a

socially desirable objective. However, with growing emphasis on market-based solutions to the use of resources, with growing adoption of the user-pays principle, and with widespread support for the new economic liberalism (which favours small government and low levels of taxation), public supply and subsidisation of many leisure commodities have been curtailed.

Thomas More and Thomas Stevens (Writing 1, Volume II), relying on a survey of householders in New Hampshire and Vermont, raise important income distributional issues about the increased use of fees for access to public resource-based recreation in the United States. They find that such fees have a high propensity to exclude low-income people from the recreational use of such facilities, particularly given the major degree of inequality in income and wealth that has developed in the United States (and other higher income countries) in recent decades. More and Stevens are highly critical of the user-pays trend towards more widespread payment for access to public resources used for recreation.

The remaining contributions in Part I, Volume II, consider the possible impacts of taxation on leisure-work choices. Their prime concern is whether taxes entail a disincentive to work and encourage the taking of more leisure than otherwise. Contributions 2-4 and 8 focus on whether progressive income taxes are likely to result in a greater reduction in work and a greater increase in leisure than proportional income taxes with equal revenue yield. In general, it was believed by neoclassical economists that there is a greater disincentive to work from progressive income taxation. However, Contributions 2-4 and 8 employ neoclassical analysis to show that this proposition does not necessarily hold. Writing 2 by G. Winston criticises the proposition of Tibor Scitovsky that proportional taxation is likely to result in reduced work effort if the government finances free public goods or subsidises the supply of goods from its tax revenue.

Contribution 6 by Conlisk and Contribution 7 by Fishelson investigate the issue of whether negative income taxes or income support schemes for the poor reduce their supply of work. Although these schemes are often believed to reduce work, Conlisk argues that this may not happen when dynamic considerations are taken into account. He points out that conventional static economic 'theory predicts a decrease in work effort, and this prediction is often used as an argument against the imposition of a large scale negative income tax mechanism'.

However, as observed by Allingham in his conclusion to Contribution 8, the social desirability or otherwise of policies to redistribute income should not be judged solely on the basis of whether or not they reduce work effort. To do so would be to adopt an extreme form of the Protestant work ethic. If the only way to achieve a more desirable distribution of

income is by adopting policies which to some extent reduce work effort and lower total production, the results of such policies may be socially more acceptable than tolerating a highly inequitable distribution of income. The extra social benefits from an improved distribution of income will need to be weighed against the social disbenefit from reduction in aggregate production.

Contribution 9 by Manuel Gomez studies dynamic effects of flat-rate taxes on growth and welfare when the leisure argument in the household utility function is specified in different ways. He considers three different ways in which it could be specified and shows that growth and welfare effects are sensitive to leisure specification. While he is able to consider a variety of tax bases, and provide a complete model of a simple endogenous growth economy, several unrealistic assumptions are required to do this. For example, a unitary household intertemporal utility function is assumed and the household is supposed to live for an infinite period of time. No specific allowance is made for the allocation of time by different partners in households, nor is any allowance made for children within families. In effect, the analysis assumes that the household consists of just one individual. Despite these limitations, Gomez's analysis makes it clear that in the light of recent development in economic theory, specification of utility obtained from the individuals of household's allocation of time is quite complex. Early neoclassical specifications assumed that utility obtained by an individual depended merely on the individual's allocation of 'raw' time between work outside the home and absence of this work. However, this is a relatively unsophisticated viewpoint.

Demand for Particular Leisure Activities (Part II, Volume I)

If one excludes those writings concentrating on cultural economics, sports economics and tourism economics, economic studies of the demand for leisure commodities and recreational activities (and of industries catering for these demands) are sparse and patchy. For example, the keeping of pets and gardening are popular leisure activities in higher income countries and support large industries catering for this demand. However, my search did not unearth any significant economic articles dealing with these aspects of the use of leisure time. Therefore, the choice of articles for this part has been constrained by the available stock of writings. A couple of sociological/psychological type writings have been included in this part to help fill the gap in economic coverage.

Chressanthis (Contribution 10, Volume II) explores influences on the demand for involvement in chess in the United States. He relies on data for the period 1946-1990 and

adopts per capita membership of the United States Chess Federation as the dependent variable. Basically he estimates the demand function for membership of this federation.

He finds that this demand function conforms with what might be expected on the basis of neoclassical economic theory. For example, he finds that the demand for membership is negatively related to the price of involvement, rises slightly with the level of income, and declines both with the availability of alternative forms of entertainment and with the amount of time allocated to work. In conclusion, he points out that technological changes, such as the availability of computer games and on-line chess, could alter his estimated demand function. In doing so, he brings attention to the importance of continuing innovation in the range of available leisure commodities in influencing the demand for particular leisure activities.

Bianchi (Contribution 11) adopts a less conventional approach in considering the factors that influence individuals to collect objects as a hobby. She draws on psychology to argue that the traditional economics of demand does not capture motives for collecting well. She claims that the desire to collect is driven by pleasure from organised novelty. However, the continuing realisation of this pleasure requires sustained collecting at a managed pace; not too fast and not too slow so as to keep the organisation and appreciation of the novelty of the collection in balance. Otherwise, the collector's pleasure is not maximised. Such a passion for collecting is not a pathological condition but displays pleasure-seeking characteristics that may be present more widely in individuals' consumption patterns. Her contribution can be classified as belonging to psychological economics or behavioural economics.

Apart from the motives that Bianchi stresses, other motives may also influence collecting as a hobby. For some collectors, speculation on economic gains from the collection may be important. The enjoyment of rarity may also be a factor and, in some cases, this may be combined with snob-like effects. Furthermore, a collection can provide a mechanism to express individuality and often it is a basis for companionship, for example, through clubs which cater for the collector's hobby.

Undoubtedly, the price or cost of engaging a hobby and income levels influence choice of hobbies. It is possible that indifference curves for choosing between hobbies and similar leisure activities are often strictly concave rather than strictly convex as is assumed for traditional economic goods. As a result, individuals are liable to specialise completely in one hobby rather than dabble in several. This is illustrated in Figure 1. If two hobbies are available, if AB represents the budget line based on the individuals allocation of his/her income for hobbies and if the curve marked I_1I_1 is the relevant indifference curve, the individual's equilibrium is established at the corner point, A. The individual engages only in

hobby B. However, if the price of engaging in hobby B falls relative to A, the individual may alter his/her hobby entirely from A to B. If the price-line is AC, the individual will be indifferent between the two pastimes but should it decline any less steeply, C will become the new equilibrium and specialisation in hobby B will be optimal for the individual. This implies that the individual's demand curve for engaging in a hobby, as a function of its relative price, consists of two components: zero demand at a high relative price and a constant demand at a low relative price of engaging in the hobby. This is assuming that the individual's budget allocation for hobbies is constant. Such a fixed budget for hobbies might occur because of the prevalence of mental accounting (Thaler, 1999).

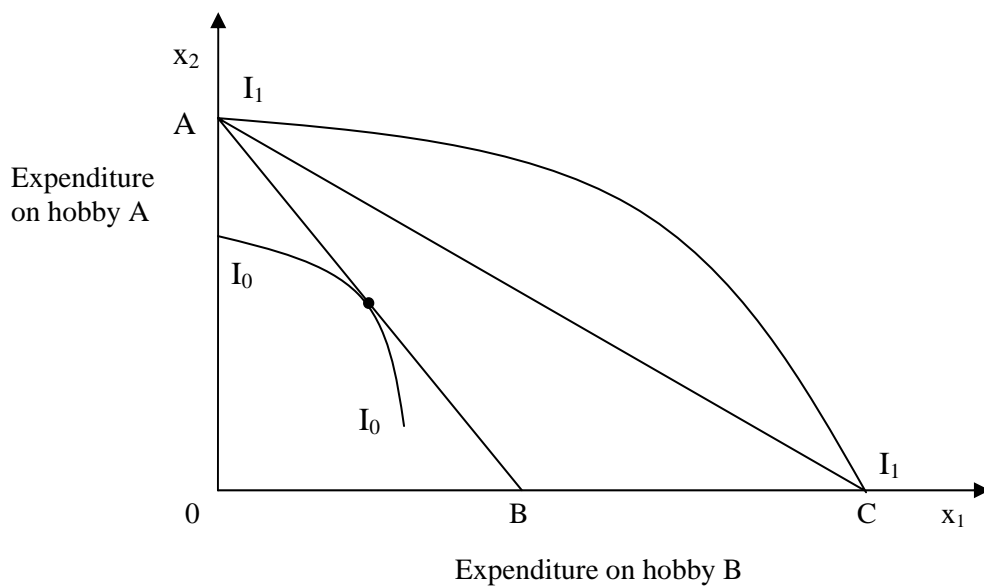


Figure 1 Indifference curves for engaging in different hobbies are likely to be strictly concave. Consequently complete specialisation in pursuing hobbies may be common.

Given the assumed nature of the indifference curves in Figure 1, income expansion paths of demand for engagement in hobbies are liable to exhibit jumps. For example, suppose that hobby A is an inferior good compared to hobby B. At lower budget allocations for hobbies, the expansion path can be expected to follow the x_2 -axis (the Y-axis) but at some higher budget allocation, it will jump to the x_1 -axis (X-axis) and follow that. Thus, those budgeting smaller amounts for hobbies (usually those on lower incomes) will engage exclusively in hobby A and those budgeting much higher amounts (usually those on higher incomes) will engage in hobby B. Consequently, the hobbies pursued by different individuals can strongly signal their relative wealth and can become distinct markers of social stratification.

Anderson's analysis of the demand to engage in recreational fishing (Contribution 12) is along more conventional lines. He assumes that it will depend on, for example, a vector of cost, price, and income parameters, including fishing expenses and the price of fish if available on the market, environmental and social factors. Other things equal, he believes that the demand for recreational fishing will increase with the average size of the fish caught and the number of fish caught in relation to total effort but he does not estimate these relationships empirically. He concentrates on the stock externality that can be expected to result for greater aggregate demand for the shared fishery resource and considers fish stock enhancement as a means to improve recreational fishing opportunities.

Anderson's model does not distinguish between the different recreational values of different species of fish nor does it consider the possibility that those engaging in recreational fishing exhibit heterogeneous behaviour and have diverse motives. Wheeler and Damania (Contribution 13), using New Zealand data, find that the demand for involvement in recreational fishing is significantly influenced by the motives of the fisher. For example, the demand of those who are motivated to engage in recreational fishing because they are interested in eating the fish caught is significantly influenced by the price of substitute fish able to be purchased in the market. However, in the case of those who fish primarily for sport, this variable is unimportant.

While many of their results accord with what might be expected on the basis of conventional demand theory, some variations also emerge. For example, the utility of sporting fishers may not always increase with the abundance of a targeted species, as Anderson supposes in Contribution 12. Wheeler and Damania provide the example of the King fish species which is targeted for sporting purposes. Sporting fishers are happy to catch one on a sporting expedition and any extras bring little or no additional utility. In such circumstances, the optimal stock of some fish species used for sport fishing could be well below their maximum sustainable yields. An increased degree of rarity of species (snob effect) and an increase in fishing as a gamble may, up to a point, add to the recreational value of a species targeted for sporting purposes.

A recreational fisher targeting a particular fish species for sporting purposes may have a utility function like that shown in Figure 2 by curve OBC, other things equal. Assuming that the stock of the targeted species can be manipulated so that the probability of the catch can be varied in the range $0 \leq x \leq x_1$, the option x_1 , the strategy giving the highest probability of the catch, does not maximise the individual's utility. A lower probability, x_0 , is optimal.

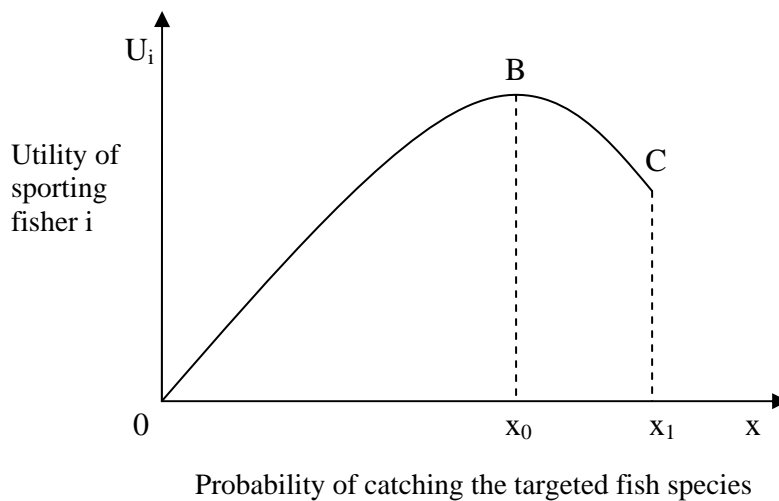


Figure 2 Increased abundance of fish species targeted for sport may not increase the utility of sporting fishers targeting the species.

Curtis (Contribution 14) observes that, while much has been written on the demand for and value of recreational fishing, there is a dearth of published material on the value and demand for water-based recreational activity. Using an augmented Poisson count model and Irish data, he estimates the trip demand for angling, boating, and other marine water-based leisure trips. He finds that the demand for each of those is relatively price inelastic at current prices but that for any significant increase in price, demand could become quite elastic. That is particularly so for his other beach sea-trips category. Using estimates of the consumer surplus obtained by day visitors engaging in the various recreational activities mentioned, he finds that the economic value of marine water-based leisure activity for Ireland is high.

He predicts that the Irish Government's National Development Plan to undertake investment to enhance the infrastructure for water-based tourism and other leisure sectors will make a worthwhile contribution to Ireland's economic and social welfare. Two goals of this plan are to promote equality of opportunity and to reduce social exclusion. Curtis considers whether there are signs of social exclusion in the leisure activities that he examines. He finds some signs of social exclusion in relation to boating activity, including sailing and cruising. He is concerned that if the Irish government should try to recover the cost of its investment in recreational infrastructure by user-fees that this may substantially reduce the demand for water-based recreation and may exclude many lower income earners. More and Stevens

(Contribution 1, Volume II) expressed similar misgivings about the growing introduction of user fees for resource-based recreation in the US.

The remaining three writings in Part II, Volume II are by non-economists. Christiansen (Contribution 15) provides an overview of the size of the gambling industry in the United States. This article finds that gambling accounts for 10 percent of the leisure expenditure in the United States and is one of the faster growing sectors of its economy. Christiansen is critical of the fact that many people regard gambling as a socially undesirable form of leisure use and he accuses most economists of being sympathetic to this point of view. Although most classical economists might have regarded the gambling industry as an unproductive service industry, neoclassical liberal economists, at least in theory, supported the notion of consumer sovereignty. An implication of this view is that if consumers obtain utility from gambling, the social welfare is likely to be raised if gambling opportunities are supplied.

Neoclassical welfare economics assumes that consumers are the best judges of their own self-interest or that they have the right to be wrong. However, there are clear cases in which consumers are not the best judges of their own self-interest. Furthermore, the right to be wrong needs to be tempered in a social setting for being wrong can impose costs not only on the individual but on others in society, such as family members. While Christiansen's view of gambling is positive, he admits that addictive gambling imposes social costs. It is estimated that depending upon the region, 1.7 to 7.1 per cent of North Americans are addictive gamblers (Volberg, 1996). Free choice by these individuals can damage themselves and others.

Baldwin and Norris (Contributor 16) provide a perspective on the keeping of pets as a serious form of leisure and report on the results of their case study of members of the American Kennel Club. They concentrate on a group of dog-keepers for whom their leisure involvement with dogs is a central life interest. To many, the degree of involvement of this group with dogs borders on the obsessive. However, when one considers the whole range of leisure pursuits and hobbies, the number of individuals with a high degree of life-commitment to these may be large. For example, Celsi, Rose and Leigh (Contribution 17) identify individuals with such commitment to skydiving. While such behaviour may be atypical, it may not be rare.

Baldwin and Rose found that in their dog study 'Leisure seemed to go beyond intrinsic satisfaction with an activity to include satisfaction derived from the expression of the relationship with the dog. In addition, there was a strong personal identification with the

pursuit that developed as an extension of the self as a learner, the social benefits of being with friends and the commitment to fulfilling the multiple roles associated with the pursuit’.

Their article also provides evidence of the presence of an endowment or status quo effect (Kahneman et al., 1991) amongst dog-lovers. Typically, those in this group exhibiting dogs retained non-performing dogs (those with imperfections for exhibition) and purchased additional dogs in the hope that these would have more suitable attributes for show purposes.

Celsi, Rose and Leigh explore high-risk leisure consumption in Contribution 17 and focus on skydiving as an example. They find that there has been a rapid increase in involvement in high-risk leisure activities and outline a model of factors that appear to encourage individuals to engage in high-risk leisure consumption. They attributed increased involvement in high risk leisure to mass media reporting, social [including economic] specialisation, and improvements in technology which reduce the risks of engaging in high-risk leisure activities.

They argue that alienation at work as a result of social and economic specialisation is a major reason for involvement in high-risk leisure activities. These activities provide an escape from the tensions of work, release and catharsis. They also provide new opportunities for identity construction which may be suppressed in every day existence. Path dependence is strong. Adults find it difficult to change jobs, their social status and their social identities. Celsi et al. believe that high-risk activities ‘provide a well-defined context for personal change, as well as a clear-cut means to organise a new, and sometimes central, identity’. This may create a sense of social achievement and belonging. However, this appears to be component of many other serious leisure activities, whether they are high risk or not (cf. Contribution 16 by Baldwin and Norris). It is also clear that involvement in such activities involves a process of learning and skill development. These dynamics seem to play a significant role in the degree of satisfaction received by individuals from their involvement in leisure activities.

An interesting issue discussed by Celsi et al. is the cognition of risk by skydivers. They are acculturated to regard high risk as normal and come to believe that risks are lower than is factually the case. The cognition of risk by participants in high-risk leisure activities appears to be biased and exhibits ‘anomalies’ of the type identified by some articles in Kahneman and Tversky (2000).

Trends in Available Leisure Time (Part III, Volume II)

Part III, Volume II consists of writings that provide insights into how the amount of leisure time available to individuals has altered historically with the stages of economic

development. While most of the contributions in this part focus on developments since the Industrial Revolution, one contribution (that of Sahlin, Contribution 18) considers leisure time and work time in pre-agricultural economies.

Taking into account all contributions in Part III, they suggest that raw leisure-time was at a historical high in hunter and gatherer economies, fell with the introduction of agriculture and declined further and steeply with the onset of the Industrial Revolution before starting to increase in high income countries towards the end of the 19th century. Leisure time then continued to increase but at a declining rate until recent decades. There is some evidence that leisure time bottomed towards the end of the 1940s and remained approximately constant until around 1970. Opinion is divided about whether available leisure time is stationary, declining or rising slightly, in recent times. Alternatively, one can consider the trend in work-time because it is a mirror image of available leisure time. The impression from the contributions in Part III is that work-time has exhibited a pattern like that illustrated in Figure 3.

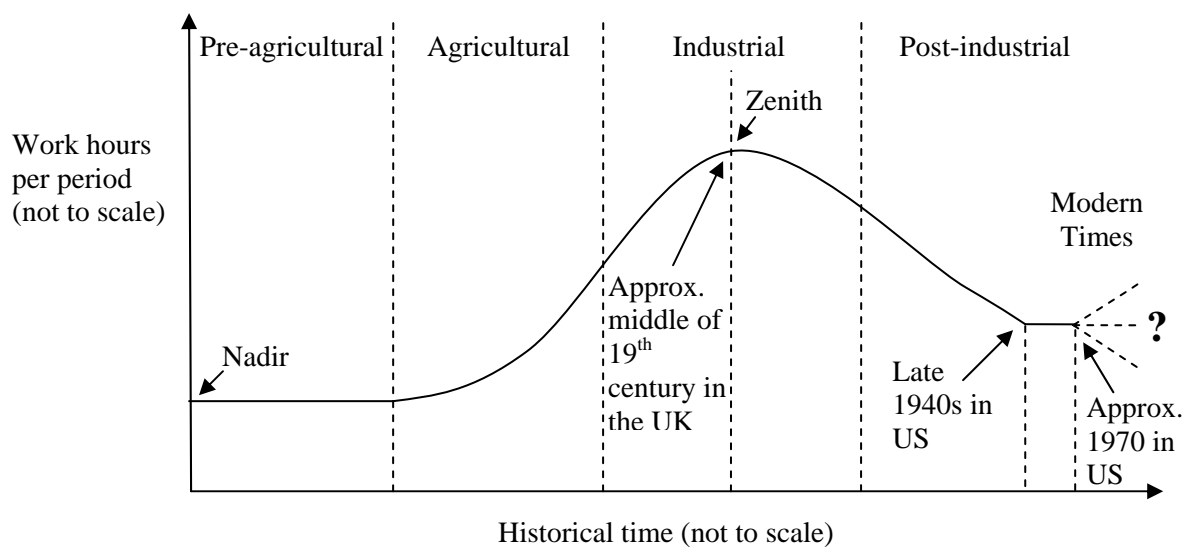


Figure 3 Hypothetical historical pattern of annual hours of work. Available leisure-time would be the mirror image of this relationship

In Contribution 19, Sahlin challenges the idea that the life of hunters and gatherers was a harsh one in which they eked out a bare existence, and then only with much exertion, long hours of toil and little leisure. Using case studies of Australian Aborigines and Bushmen in

Southern Africa, he argues that they were, in a sense, relatively affluent did not have to work very hard, and had much leisure time. He finds from secondary sources that the average hours of work per day for one Australian Aboriginal group was 4-5 hours per day. Furthermore, the average hours of work differed little between males and females, and in his view their work was not physically demanding. He claims that ‘a good case can be made out that hunters and gatherers worked less than we do; rather than a continuous travail, the food quest is intermittent, leisure abundant, and there is greater amount of sleep in the daytime per capita per year than in any other condition of society’.

However, it has been argued that hunter-gatherers did not have a very satisfying leisure-experience because their leisure time consisted merely of forced idleness (Just, 1980; Chick, 1984). ‘Raw’ leisure time is likely to be a poor indicator of the level of satisfaction or happiness derived from leisure. Commodities consumed in leisure time can add to the enjoyment of leisure. However, such commodities, if available in excess or if lacking in suitable qualities for enhancing leisure, may have negative implications for the utility obtained from leisure (see, for example, Linder, Contribution 19, Volume I).

Deane (Contribution 19, Volume II) finds that following the onset of the Industrial Revolution, the standard of living in Britain increased substantially in the hundred years to the 1850s. However, the gains were uneven for individuals and came at the cost of reduced leisure time. She comments that ‘it is doubtful if many pre-industrial workers spent quite so many hours per day and per week, on the job as was common in the mid-nineteenth century’. This observation accords with that of Cross (1990).

Deane finds that 60 hours of work was common around the middle of the nineteenth century, and holidays were few. Loss of leisure and an increased tension during the Industrial Revolution was associated with a rise in suicide rates in the 19th century. In her view, it was not clear that the lot of the working class improved. She comments ‘if the working class earned more and spent more in 1850 than the labouring class in pre-industrial times, they paid for it in intensified toil’.

Mathias (Contribution 20) points to how many of Britain’s social ‘elite’ emphasised the importance of the backward bending supply curve for labour provided by workers. Mathias suggests, however, that support for this view was based more on social prejudice and the self-interest of higher income groups rather than scientific facts. Social elites also believed themselves to be free of the tendency to take extra leisure time as their wealth increased. British elites widely subscribed to the view that workers had a high relative preference for leisure time and that if paid other than very low levels of wages would reduce their working

hours. It was argued that to pay higher wages would lead to increased leisure by workers which would be widely used for undesirable leisure activities such as drinking alcohol and gambling. This unproductive use of leisure-time could lower work productivity, cause distress in families and, to boot, many workers could end up in poor houses and have to be supported by the public because of their errant use of leisure. Furthermore, British exports might suffer due to increased costs of production resulting from higher wages. These views helped to provide moral and economic support for the payment of low wages to workers. Apparently, however, it was acceptable for the elites to engage in many of the leisure activities forbidden to workers. Furthermore, there was no mention of the possibility that shorter hours of work (at least up to a point) might increase productivity, as might better conditions of work.

Mathias is convinced that the relevance of the backward bending supply curve of labour was over-rated by most writers in the eighteenth and nineteenth centuries. He suggests that the target level of income implied by this type of labour supply curve is just a short-term phenomenon because target or income-aspiration levels are dynamic. The advent of the Industrial Revolution marked the beginning of mass consumerism. A greater range of commodities became available to more individuals than before and were marketed vigorously, thereby raising workers' demand for commodities. This increased their income aspirations and willingness to work with the passage of time, according to Mathias. Nevertheless, it may also have been that employers demanded longer fixed schedules of work to fit in with the rhythm of industrial production. Therefore, workers lacked free leisure-work time choices. They may have been forced to accept their job on the conditions prescribed by employers or not have a job. Individual workers probably had little bargaining strength in relation to their hours of work in the nineteenth century.

The view that capitalism fostered consumerism and thereby encouraged individuals to forego leisure for work has been supported by Juliet Schor (1992). She argues that in the United States the annual hours of work (inclusive of housework), after declining for about 100 years until around 1948 remained stationary until about 1970, and have subsequently increased slowly but perceptibly. Time pressure has become a major problem for families. This point of view is supported by Gary Cross in Contribution 21 where he claims that 'time and money are the greatest scarcities of modern times'. While Cross mostly supports the capitalist driven mass consumerism thesis, Schor attributes the increased hours of work in the US not only to this phenomenon but also to growing employer demands. She suggests that conditions of work are offered by employers on a take it or leave it basis. Because the

bargaining position of employers has been strengthened in recent times with reduced union membership and power, it may be becoming easier for employees to impose their desired hours of work on employers.

Not everyone, however, supports Schor's thesis. In reviewing Juliet Schor's *The Overworked American: The Unexpected Decline of Leisure*, Frank Stafford (Contribution 21) favours the conventional economic view that the hours of work for both men and women, inclusive of housework, have continued to decline. In addition, he expresses dissatisfaction with the quality of Schor's analysis. Nevertheless, while there are variations between countries and in timing of the trends, there is strong evidence in supporting the hypothesis of increased time scarcity in recent time (see contributions by Horrell and by Zuzanek et al.). Furthermore, inequality in the availability of leisure-time appears to have risen amongst individuals.

Contributions 22-24 provide further empirical evidence or trends in the availability of leisure time. Kneiser (Contribution 22) reports that the average hours of work of full-time workers in the US declined by 35 per cent between 1900 and 1940 but did not change significantly between 1940 and 1970. Rones et al. (Contribution 24) use the Current Population Survey in the US to provide information on trends in the average work week and the distribution of hours worked within and between occupations, from the mid-1970s to the mid-1990s approximately.

They find that the average annual work hours of employed men rose by 5.5 per cent between 1976 and 1993 and for women by almost 20 per cent, a result consistent with Schor's thesis. However, they also find growing inequality in work time. The proportion of full-time workers working more than 49 hours per week rose between 1985 and 1993 for both men and women in all occupational categories. The proportion of persons working very long working weeks has risen. At the same time, it is also probable, but not specifically discussed by Rones et al., that the proportion of persons working a short week has risen due to an increase in part-time work. In any case, such a trend is evident in Australia during the period 1980-1992. Consequently, in this period, the working hours of employed Australians became more dispersed (see Contribution 25).

The study of Dawkins and Simpson (Contribution 25) shows that the annual hours of work outside the home of both fully employed Australian males and females rose between 1982 and 1992. On average, the increase for men was 6.7 per cent and the rise for women was 4.75 per cent. On average, hours of full-time work crept upwards in this period in Australia. One might expect it to be associated with growing time-squeeze. However, there is also Australian

evidence, mentioned by Dawkins and Simpson, that many part-time workers have less paid work than they want. It may also be that some full-time workers, especially those with a long working week, have more paid work than they want. For many individuals, there seems to be an imbalance between their demand for paid work and its supply.

Contribution 26 by Dora L. Costa provides a different perspective on trends in work and leisure time. She finds that in the 1890s America's lowest paid workers worked the longest day where as in 1991 high-paid workers worked the longest day. Thus, a reversal of working hours and available leisure time has occurred between social classes.

Data available in Rones et al. (Contribution 25) indicate that the percentage of American labourers working more than 49 hours per week is much lower than for managers, professionals and sales persons but in transportation the percentage is high. The results are consistent with the observation by Robinson and Godbey (1997) that Americans with a college education work longer hours than those with less education. Coleman and Pencavel (1993) found that this inequality increased from 1940 onwards.

Since 1970, income inequality has risen in the USA (see, for example, Mishell et al., 2000). The more highly educated have increased their share of total income markedly (see, for instance, Tisdell and Svizzero, 2004). But this has been at the expense of considerable loss of leisure time compared to the less educated, according to Costa. So it seems that in recent times that the better educated members of society have experienced greater time squeeze than the less educated. Therefore, it is important to investigate not only trends in the average availability of leisure time in society but to consider also trends in its gender distribution, and its variation by occupational category and educational status. In addition, life-cycles of leisure availability for individuals need to be examined, and the ways in which these have changed with economic change and development.

Miscellaneous Contributions to Leisure Economics (Part IV, Volume II)

Writings in this part consist of contributions that are relevant to leisure economics but which cannot be easily fitted into the framework described above. The first one by Freeman (Contribution 27) points out that many people volunteer to work without payment and he investigates the reason for this. Volunteer work is estimated to account for about a quarter of labour input to the charitable or non-profit sector in the US. Volunteer work makes a substantial contribution to the US economy as it probably does to most higher income countries.

Freeman argues that standard economic theory of labour supply ‘which predicts that individuals will volunteer less when the opportunity cost of time (wages) is high – explains only a minor part of the difference in volunteer activity among individuals with *similar demographic characteristics* [my italics]’. He finds that volunteers in the 35-54 age group tend to be those with a high opportunity cost of time, usually the better educated with higher mean incomes and hourly earnings than others. Thus, economic opportunity costs do not appear to predict the participation of individuals in this age group of volunteers well. He argues that volunteers in this group mostly only volunteer when asked. They volunteer because they face social pressure to do so and recognise a moral case for voluntary help. Their volunteer activity is motivated to some extent by their conscience. Such social factors are neglected in neoclassical economic theory. However, Freeman feels that opportunity cost may play a significant role in the supply of volunteer labour by the elderly, many of whom are retired. Nevertheless, even in their case, their conscience may play a role as well as their need for social recognition and their desire to make a socially beneficial contribution (see O’Brien, Contribution 4, Volume I).

Section IX of Lancaster’s article (reproduced here as Contribution 28, Volume II) proposes the characteristics approach to demand as a method of analysing occupational choice. It is widely recognised that choice of occupation is influenced not only by the wage rate paid but also by the non-monetary advantages and disadvantages of alternative occupations. The characteristics approach is, however, relatively mechanical in nature and relies on linear activity analysis. It is doubtful if all important job attributes can be captured as measurable linear units. This is not to deny that characteristics or attributes of commodities constitute a more fundamental basis for demand theory than a focus on commodities, as is done in neoclassical economics.

Walsh (Contribution 29) extends the neoclassical theory of international trade to show that nations can gain from international trade when their citizens have different leisure preferences even if they have the same factor proportions and the same product transformation functions, assuming they were to take the same amount of leisure. The country with a greater preference for leisure will realise part of its gains from international trade by taking more leisure. Increased leisure opportunities can constitute a gain from international trade. Welfare gains from international trade may be realised purely in terms of greater leisure, a combination of increased leisure and consumption, or purely in terms of higher levels of consumption of commodities. Nevertheless, in an international trading situation, many governments and economists (see Dawkins and Simpson, Contribution 25)

are wary about citizens foregoing work and consumption of commodities in order to enjoy more leisure. Why this is so is not clear.

Although economists have recognised the importance of the household economy, studies of it concentrating on leisure choices within the home and of the demand to enjoy leisure time within the home rather than outside of it are few. The article by Darton and O'Neill (Contribution 30) provides a useful perspective on these aspects.

Increasing time-squeeze does not show up as a problem in their British sample but the time period considered is quite short. Several results are of interest. They found that manual workers spend more time at home than professional workers. More than two-thirds of respondents who were spending more time at home said it was due to lack of money. They found that, while expenditure on leisure commodities rose rapidly in the 1980s, an increasing proportion of this expenditure is for enjoyment of leisure in the home. They discovered that new household technologies have significantly altered family life with individualistic enjoyment of leisure activities rather than sharing of recreational activities in the household becoming more common. This trend is likely to continue with advances in technologies used in the home. There is a need to update research on this subject and for economists to undertake evaluation of the factors influencing substitution between home-based leisure activities and away-from-home recreational and leisure activities.

Scarcity of time and the optimal allocation of time have become central issues in leisure economics. The time required to engage in an activity outside the home can usually be divided into two parts: the time needed to travel to the destination where the focal activity is to be undertaken, and the time used to engage in the activity at the destination. Particularly in the case of visits to outdoor sites for leisure purposes, economists have given particular attention to how to value travel time. Approaches have varied from making no allowance for it, to valuing it at the hourly wage rate that travellers might have earned if they were at work, or a fraction of this rate; often one-third.

However, Alvarez-Farizo et al. (Contribution 31) find that such measures are poor indicators of the opportunity cost of travelling time. There are two reasons for this. First, the opportunities that different individuals have to allocate time saved in travelling to extra paid work varies considerably. Secondly, an often overlooked value of travel time saved is that it provides extra time to enjoy the attractions for which the travel is intended, or to enjoy other activities including other leisure activities. These considerations should be factored into the costing of travel time.

Alvarez-Farizo et al. support their contention by undertaking a Spanish-based case study. Contingent rating or conjoint analysis is applied to specify the stated preferences of a sample of residents of Zaragoza, Spain, for visiting Ordesa and Monte Perdido National Park. The choice alternatives evaluated involve various combinations of time stayed at the park, journey time, and the cost of the journey.

Concluding Assessment

In studying the economics of leisure, it is necessary to take account of the cross-disciplinary and interdisciplinary features of leisure. While neoclassical economics, especially if supplemented by its extensions which allow for time allocation and the household economy, can provide valuable insights into choices about leisure and the availability of leisure time, neoclassical economics displays several limitations. Its reductionist approach results in insufficient consideration being given to social effects on leisure-work choices. Furthermore, it usually proceeds on the basis that individuals are well informed, are not subject to bounded rationality, and supposes that preferences and perceptions of possibilities are settled. However, discovery and learning help to shape preferences about leisure options and many other commodities as well. This can result in a high degree of path dependence for preferences and beliefs (see, for example, Contributions 11, 16, 17 in Volume II). There is a case for economists to extend their analysis to include processes involved in choice along the lines considered in psychological economics and in behavioural economics.

An issue raised by several writings in this collection is whether (in recent decades) individuals, especially within families, are being subjected to increasing time-squeeze as a result of longer hours of work and the increasing tendency in higher income countries for both husbands and wives to work outside the home. While most studies tend to support this hypothesis, there are some writers (see Contributions 22 and 30, Volume II) who are not convinced of this. Costa (Contribution 26, Volume II) suggests, on the basis of US empirical evidence, that while time-squeeze has increased for the more educated and higher income earners in recent decades, it has actually fallen for labourers. The time-squeeze phenomenon appears to be operating unevenly in society. While some members have inadequate free time others have excessive free time in their view, for example, the unemployed, many of those in part-time employment and some of the retired. Institutional constraints on work availability restrict individual choices and result in many individuals being faced with leisure options that are far from ideal from their point of view.

Available economic studies of particular leisure activities and industries are scarce and patchy. While there is considerable economics coverage of sports, cultural activities, and outdoor recreation, comparatively little attention has been given to the economics of home-based leisure activities. Yet, as Darton and O'Neill (Contribution 30, Volume II) point out, home recreation accounts for a large proportion of leisure time and leisure expenditure. For example, they find in Britain that the keeping of pets and gardening are important home-based leisure activities. The retail space allocated in higher income countries to commodities to satisfy these pastimes is quite large and apparent. Large industries cater for these demands but there are few economic studies of these industries.

Changes in the cost and the availability of leisure opportunities are raised in several writings. Owen (Contribution 8, Volume I) estimated that the real cost of leisure commodities in the US fell in the period 1900-1970. However, while this may be so, the leisure price index would undoubtedly be sensitive to the weights placed on different leisure commodities and the bundle considered. Both More and Stevens (Contribution 1, Volume II) and Curtis (Contribution 14, Volume II) express concern that the access of the less well-off to natural resources used for recreation is, or might become, more costly due to greater adoption of the user-pays principle. This reduces the possibility that the poorer members of society are being increasingly excluded from a range of recreational opportunities that were once free, or almost so. Given the growth of urban areas, the cost of reaching natural recreation areas may also have risen comparatively, disadvantaging poor urban dwellers. Casual observations indicate that many urban dwellers rely on visits to shopping malls as one means of using part of their leisure time. How satisfactory this is as a form of leisure use is difficult to say but it may indicate lack of other inexpensive alternatives.

There appears to be differences of opinion about whether individuals are enjoying their leisure-time more than in the past or not. Lindner's hypothesis (Contribution 19, Volume I) suggests that leisure-time could be less enjoyable than in the past. A possible interpretation of the findings of van Praag et al. (Contribution 26, Volume I) is that, on average, Germans are less satisfied with their leisure time than with their work time. This raises the issue of whether there is any social obligation for the state, local government, or the community, to try to improve opportunities for individuals to obtain more enjoyment from their leisure. Particularly in relation to infrastructure for outdoor recreation, some state governments (e.g. the Irish government, see Contribution 14, Volume II) and some local governments believe that such an obligation exists and support community leisure activities and initiatives. Scope exists for more in-depth analysis of this aspect of public economics.

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APPENDIX

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