

An Economist's Take on Work-life Balance

Tim Robinson¹

1 Queensland University of Technology, GPO Box 2434, Brisbane Qld 4001, t.robinson@qut.edu.au

Abstract

Increasing incidence of paid work in Australia and many other countries is often seen as severely compromising work-life balance. This paper examines whether, contrary to popular belief, increasing devotion of time to paid work might, from an economic perspective, be explained as a rational, welfare increasing response to changes in independent variables that affect the work, leisure trade off. More importantly, however, it is argued that even if *increases* in paid work hours can be explained as resulting from attempts to maximize well-being, the *absolute level* of work effort at any time will be excessive as compared to the optimal or 'right' level of work. The paper shows that when quality of life is reduced as a result of negative externalities resulting from factors such as environmental degradation and congestion, individuals are encouraged to work longer hours to compensate for this reduction. These longer hours of work aggravate environmental damage and congestion resulting in further increases in compensatory work effort. Thus there is a vicious circle of overwork and over consumption. Furthermore, no individual can gain by unilaterally reducing their work effort since any such reduction will have no perceptible effect on the quality of life they experience. Only on the basis of government intervention of some sort can the market failure that causes excessive work effort and loss of work life balance be corrected.

Introduction

The English-speaking world seems to be obsessed with work-life balance. Prime Minister's spokespersons on women's issues, union movements, and organizations dedicated to improving family life have all been calling for changes that will restore the balance. In the Australian context, the adverse social effects of work-life imbalance have recently been the subject of a widely publicized report commissioned by the Relationships Forum. (Relationships Forum 2007).

Principal amongst the many causes given for loss of work-life balance is an observed tendency for weekly or annual work hours of full-time employees to have increased in recent decades. Exhibits 1 and 2 give examples of the manifestation of this phenomenon in Australia. However, as well as working longer weekly or annual hours, increased work effort can also be manifested in increased participation rates which, as Exhibit 3 reveals, have been

of particular significance in the case of women. While it is clear that there have been increases in work hours for many Australians in recent decades, and while this is also true for some other countries, there may be good reasons - some of which will be examined shortly - for such an increase.

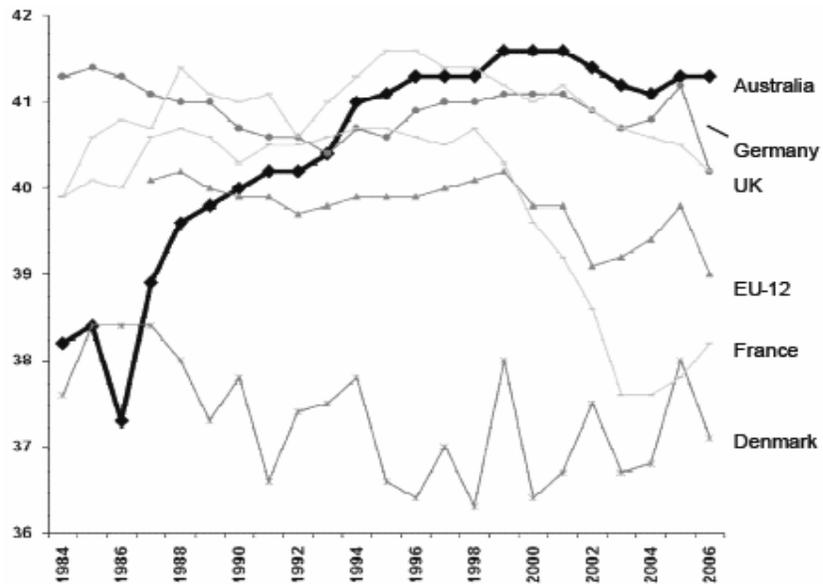


EXHIBIT 1

Average Actual Weekly Hours for Full-time Employees

Selected Countries (Source: Relationships Forum 2007)

Country	Long Hours ⁽¹⁾ (>50 per week)
Japan	28
Australia	22
New Zealand	21
USA	20
UK	15
Canada	14
Greece	6
Ireland	6
Spain	6
France	6
Portugal	5
Germany	5
Denmark	5
Finland	5
Italy	4
Belgium	4
Sweden	2
Netherlands	1

EXHIBIT 2

Percentage of Workforce Working Long Hours

Selected Countries (Source: Relationships Forum 2007)

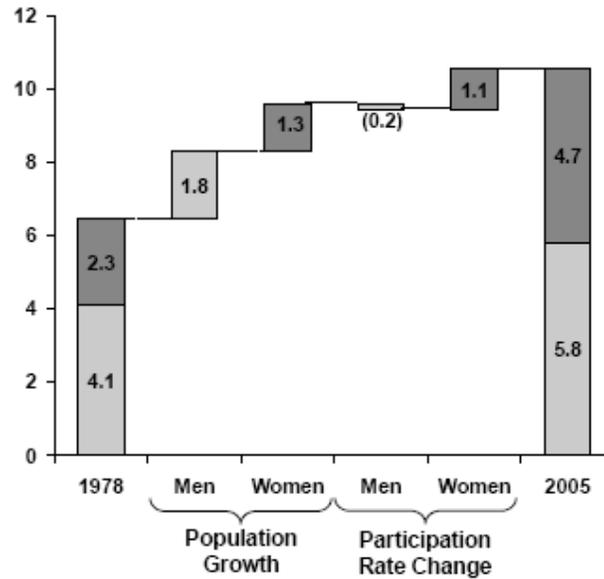


EXHIBIT 3

Components of Australian Labour Force Growth (millions)

(Source: Relationships Forum 2007)

Unfortunately, in recent public discussions of the tendency for hours of paid work to increase, an economic viewpoint has seldom been taken. The purpose of the paper is twofold: first, it endeavours to give an economic explanation for the tendency of individuals to increasingly devote more time to paid work and less to leisure; second, it explains why, even if a sound economic explanation can be given for the *increase* in paid work hours, the *absolute level* of work hours undertaken in market economies is typically excessive in relation to the optimal or ‘right’ level. Work-life balance is not being achieved but the recent tendency for paid work hours to increase does not help explain why.

Explanations for Long Work Hours

There is a small but diverse literature in which attempts have been made to give some reasons for the contemporary situation in which paid work hours are perceived to be excessive. This literature tends to emphasise increased weekly hours per employee, while giving less emphasis to increases in paid work brought about by increases in participation rates. As we shall see shortly, both factors are important in understanding the current situation. Although some economists have contributed to the literature dealing with increased paid work hours, their explanations of this phenomenon often seem to be no more credible than those contributed by other commentators such as journalists and sociologists.

For example, Juliet Schor who, at the time, was described as a Harvard economist argued in her 1992 bestseller, *The Overworked American*, that work is excessive because workers “want what they get” in terms of work hours rather than “getting what they want”. However, her argument that it is employers who determine work hours rather than workers, is later negated in the book when she discusses the many workers who choose to work more than one job and women who increasingly choose to substitute work for leisure. Economist Lester Thurow explains increased work time as resulting from an increase in the work ethic of Americans (Thurow 1985) . However, nowhere does he explain this increased preference for work over leisure which is the very phenomenon that requires an explanation! (Stigler and Becker’s “De Gustibus Non Est Disputandum” 1977 is relevant here.) Former US Labor Secretary Robert Reich blames, primarily, increased competition between suppliers – both firms and workers – for increases in work effort (Reich 2002). While, at first blush, such an explanation may have some plausibility, he goes on to explain work as an increasingly harried activity. Surely such an outcome is one that would have economists predicting that workers would work less rather than more given that the unpleasantness of work has increased. Other economic explanations

cite factors such high fixed costs of employment – including, in some cases, taxes on employers - that cause employers to impose on employees longer hours in an endeavour to spread these fixed costs (see, for example Shields 2006). Another economic explanation - one which generally involves no normative judgement regarding whether work hours are excessive - revolves around the idea that low tax regimes in some jurisdictions (for example, the US) encourage a higher level of work effort than is found in others which have high taxes (for example much of Europe). (See, for example, Prescott 2004.) A common institutional argument for work effort to be higher in some countries than others is that work effort is greater in countries with weak unions than in those where unions are strong (see Alesina, et al 2005 and Gordon 2002).

Other, less-economic explanations for overwork include: the role of advertising and marketing that strip us of our consumer sovereignty resulting in us having to work more to finance our excessive consumption; the perception that there is an increasing cost of living a satisfactory life; and the argument that keeping up with the Joneses – the hedonic treadmill – requires us to increase work effort. In relation to this last explanation, some economists have argued that this behaviour constitutes a market failure (because the Joneses confer a negative externality on the rest when they undertake conspicuous consumption) which should be tackled by government intervention designed to limit that conspicuous consumption. (see Heath 1999) Given that emulative behaviour has been a characteristic of communities throughout recorded history, it seems that a science such as economics which claims to have a descriptive, rather than prescriptive, foundation is not being true to its philosophical roots if it results in policy proposals that attempt to change the very nature of human behaviour. Indeed, the pamphleteer, Mandeville, argued in his “Fable of the Bees” 300 years ago that emulative

behaviour, amongst many other ill-regarded human characteristics, helps rather than hinders economic progress (Mandeville 1795, p.5):

The Root of evil Avarice,
That damn'd ill-natur'd baneful Vice,
Was Slave to Prodigality,
That Noble Sin; whilst Luxury.
Employ'd a Million of the Poor,
And odious Pride a Million more
Envy it self, and Vanity
Were Ministers of Industry;
Their darling Folly, Fickleness
In Diet, Furniture, and Dress,
That strange, ridic'lous Vice, was made
The very Wheel, that turn'd the Trade.
Their Laws and Cloaths were equally
Objects of Mutability;
For, what was well done for a Time,
In half a Year became a Crime;
Yet whilst they alter'd thus their Laws,
Still finding and correcting Flaws,
They mended by Inconstancy
Faults, which no Prudence could foresee.

Many of the explanations for increases in work hours have come from critics of the observed tendency of hours to increase. It would seem that their distaste for a society in which the people work longer hours has overridden any attempt to give rational explanations for this phenomenon. Keeping in mind that it will later be argued that, for reasons that are not immediately obvious, the *absolute* level of work hours is indeed excessive, in the next section of this paper sound, and obvious, reasons as to why there has been an *increase* in work hours in recent times will be canvassed.

Some Sound Economic Arguments for Increased Work Hours

In the debate surrounding work-life balance, the sorts of explanations for increased work effort that simple economic theory could provide are, for some reason, passed over. Yet our understanding of labour markets provides a rich framework with which to analyse this phenomenon. According to economists the work, leisure trade off involves sacrifice of pleasurable leisure time in order to earn income by engaging in unpleasant work. The funniest economist of all, Stephen Leacock, put it this way:

“It is to be noted that the willingness to submit to ‘work,’ in the true sense, is an acquired capacity which the human race has taken on, with vast advantage to the mass, within the last ten thousand years or so. Some of us have not got it yet. ... But the rest of us, along with the horse, the ox, the jackass and the elephant, are long since broken into ‘work’, to the idea of submitting to the imposition of labour by the hour, often very meaningless in itself, as a condition of living, a sort of compromise between freedom and slavery.” (Leacock, 1944, p. 14)

In the light of the economic theory of labour markets we could hypothesise that an increase in work hours in the Australian economy (increased participation rates plus increased annual work hours of the full-time employed) over recent decades might be the result of one or a number of the following factors:

- Decreased displeasure of work, *cet. par.*; a likely outcome given the increased growth in services as a proportion of GDP and improved work conditions generally;
- Where increases in real wages have occurred they could, through the substitution effect, encourage substitution of paid work for leisure;
- In a dynamic context, the strong economy, characterized by 16 years of continual annual growth, could have resulted in intertemporal substitution of paid work effort in favour of the present – this could be manifested in increased annual work hours as well as increased participation rates;
- Increasing incidence of late entry into the workforce and early exit from it may also favour more intensive work patterns while actually at work.
- Decreasing fertility rates and use of labour saving devices in the home may have increased participation rates of former stay-at-home parents.
- More intensive consumption during time spent in leisure activities could lead to a substitution of leisure complements for leisure itself. That is, shorter periods of leisure with high levels of complementary consumption could be being substituted for longer, less consumption-intensive periods of leisure.
- Finally, subsidization of child care along with exhortations from conservative politicians and the business lobby designed to encourage increased workforce participation – particularly amongst women and older Australians – may have increased work effort.

On the other hand, from an economic perspective, the following could lead to a reduction in work hours/participation rates:

- Increased real wages which, through the income effect, would result in substitution of leisure for paid work;
- Less intensive consumption associated with leisure could lead to longer periods of leisure with relatively lower levels of complementary consumption.
- Legislative and other changes that encourage later entry into and/or earlier exit from the workforce might lower participation rates.

Clearly, it could be argued that conditions in the Australia economy over the past two decades have been such as to provide, on balance, more reason for increases rather than decreases in work. The increased incidence of paid work that is seen as the outward visible sign of work-life imbalance may be no more than a normal reaction to changing economic variables. The observed tendency of Australians to work long hours may be perfectly rational, may be in accordance with what economic theory would predict, and may thus be precisely what is to be expected.

Although *increases* in work hours over time may be readily explained by looking at changes in relevant independent variables, this does not mean that, at any given time, the *absolute* level of work effort can be similarly explained. Indeed, in the next section it will be argued that individuals typically engage in *absolute levels* of work effort that are excessive in relation to the optimum.

Why Absolute levels of Work effort Are Excessive

Notwithstanding the increase in paid work hours that has occurred in many English-speaking countries in recent decades, the enormous decline in lifetime waking hours devoted to work as opposed to leisure that has occurred in democratic nations over the past century or more is viewed as evidence of an increased preference for leisure over paid work. As an example of this decline, it is estimated that over the past 150 years in the UK the percentage of lifetime disposable hours allocated to work has declined from approximately 50 per cent to just 20 per cent (Nordhaus 2000, p. 261). If one thinks that present day work hours are excessive, consider Bryant's description of work effort in the UK in the first half of the 19th Century.

“No one could gainsay the tireless energy with which the British worked to achieve success. The hours of the north country factories ranged from sixty-five to seventy-five a week. The operatives who combed and sheared the cloth of the West Riding worked from four in the morning till eight at night. ... The London shops closed their shutters at midnight and opened again at dawn.” (Bryant, 1958, p.321)

The increased preference for leisure which, over the past century or more, has brought about such a marked reduction in lifetime hours devoted to paid work is typically explained as being fuelled by continual increases in real remuneration for work that have occurred, almost without exception, for more than a century. The argument is that, in spite of the tendency for increased remuneration to encourage greater work effort through the substitution effect, the capacity of this increased remuneration to enable us to work less hours for a given income dominates in the longer term, leading to a reduction in work hours (the income effect).

Nonetheless, as argued in the previous section, this income-induced reduction in work hours has not been sufficiently large to reduce work hours to their optimal level.

It will be argued that this outcome stems from a 'fundamental flaw' in market economies which causes us to unknowingly work excessively. This fundamental flaw is caused by environmental disamenity (including congestion) which is the consequence of the productive activities we engage in at work and the consumption activities that are funded by the income we earn at work. The environmental disamenity caused by aggregate work and consumption in the economy constitute costs of work which we do not take into account when deciding the amount of work we will undertake. Rather, in deciding what the level of work effort should be (either collectively or individually), we make a comparison only between the displeasure directly caused by work effort and the consequent pleasure experienced when work-based income is spent for consumption (see Robinson 2006).

If, however, our comparison were between the pleasure experienced from consumption and the displeasure caused by work effort *plus* the cost of the environmental disamenity caused by that work effort and by the consumption it enables, the outcome, in terms of hours worked, might be very different. We would be setting the benefits of a given level of consumption against a higher level of costs. And how would the level of work effort change in these circumstances? There are two aspects of this question that need to be considered.

The first aspect of the consequences of acknowledging and acting upon increased costs of work effort to be considered is associated with the substitution effect which sees rising real incomes encouraging an increase in work effort as the better-remunerated work is substituted for leisure. Using an extension of this logic, it would be expected that, for any given level of

real income, recognition of the increased costs of work effort caused by environmental disamenity would encourage a short term substitution of leisure for work. Unfortunately, when assessing the trade off between work and leisure we do not directly attribute these economy-wide costs to our work effort and so, on this count, we work excessively. And even if we did take these costs into account there is nothing we could do about them: a unilateral decision on our part to reduce work effort in order to reduce the extent of environmental disamenity would make no difference to the amount of disamenity we would experience since our individual contribution to it is miniscule. When individuals are the unintended beneficiaries of the actions of others we say that they are *free riding*; in the case being discussed here, where individuals are the unintended victims of the actions of others, we could say they are *forced riders*.

The second aspect of the consequences of acknowledgement of increased costs of work effort is associated with the income effect which sees rising real incomes having the effect of reducing work effort because a given level of consumption can be funded by working fewer hours - more leisure can be afforded. This tendency has clearly dominated the substitution effect during the past century, with the result that the overall effect of rising real incomes has been, as we have seen, for work effort to decrease. This stands in marked contrast to the tendency, discussed above, for the long term decrease in work hours to have been halted or even been reversed in some countries in recent times in spite of continuing increases in real incomes. So, what is it about the recent past that has caused us to increase rather than decrease our work effort? As well as the possible causes listed above, there is a reason associated with the income effect that needs to be examined. This reason for increased work effort in the face of increasing real incomes can be understood by looking at the US where,

although real incomes have risen almost continually over the past three decades, quality of life has declined or has at least stood still over the same period.

If we look at this quality of life data it can be seen that the effect on well-being of increases in real income (GDP) per capita over the past 30 years in the US have been largely negated by a range of factors, the most important of which are growing environmental disamenity, congestion and resource depletion. This is illustrated in Exhibit 4 below which shows that since the mid 1970s, the Genuine Progress Indicator (GPI) – the most comprehensive alternative measure of well-being per capita constructed to date – has declined in spite of large increases in GDP per capita. This contrasts strongly with the 1950s and 60s when GPI rose in concert with GDP per capita.

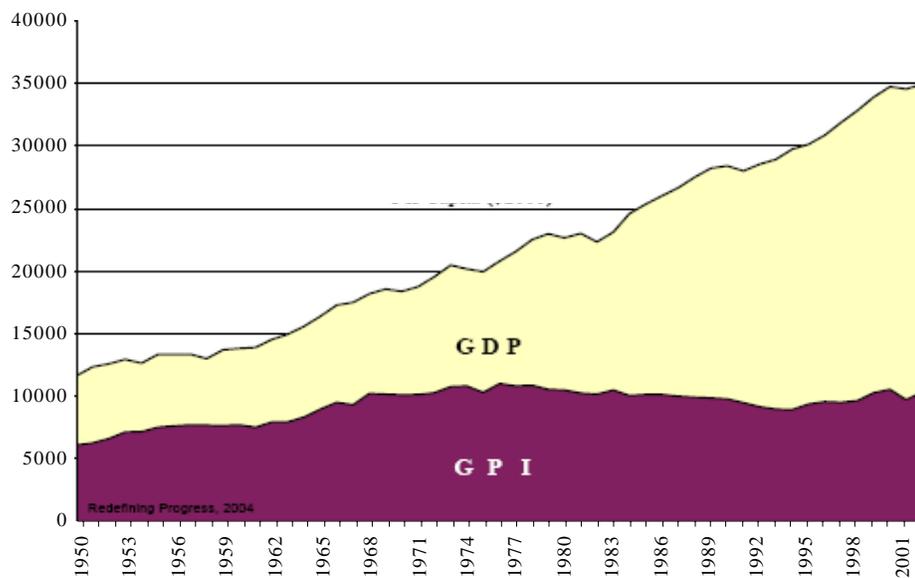


EXHIBIT 4

U.S. GDP versus GPI 1950-2002 (\$ per capita)

(Source: Redefining Progress 2004)

Not only is there cost-based evidence of declining quality of life but there is also anecdotal evidence. For example, commenting on English Journalist Jeanne MacKenzie's contemporaneous account of the Australia she visited in 1959-60, travel writer Bill Bryson remarks that what strikes him about comparisons between then and now is "... not how much better off Australians are today, but how much worse they feel." (Bryson, 2001, p. 172) In examining a photographic history of a renowned Australian beach resort Bryson observes that the holiday makers of the 1940s and 50s were not "happy"; they were "*happy*". He goes on to say: "I wouldn't suggest for an instant that Australians are unhappy people now – anything but, in fact – but they don't have that happiness in their faces any more. I don't think anybody does." (Bryson, p.165)

Or consider the call from British Conservative leader David Cameron in his 2006 general well-being speech

(http://www.conservatives.com/tile.do?def=news.story.page&obj_id=131047):

"Well-Being can't be measured by money or traded in markets. It's about the beauty of our surroundings, the quality of our culture, and above all the strength of our relationships. Improving our society's sense of well-being is, I believe, the central political challenge of our times."

Although its conservative source may be novel, such a call is, of course, not new. The following quote is from Democrat Robert Kennedy's 1968 speech (Kennedy, 1968) on the shortcomings of GNP as a measure of well-being:

“[GNP] does not include the beauty of our poetry or the strength of our marriages, or the intelligence of our public debate or the integrity of our public officials... GNP measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile.”

When, over time, rising real incomes are linked with rising quality of life, as occurred in the 1950s and 60s, it is to be expected that individuals will reduce their work effort because a given quality of life can be obtained with less work effort – leisure is more affordable. If, on the other hand, rising real incomes are associated with falling quality of life, as has been the case over the past 30 years in the US, individuals will tend to work harder to earn more income to compensate for this fall in quality of life - leisure has become less affordable. (This effect has some similarities with Glaeser et al’s social multiplier that sees, inter alia, the benefits of leisure increasing as positive externalities of partaking of leisure grow with increases in the amount of leisure undertaken by individuals in a society – a sort of social network externality (see Alesina, et al 2005). When these positive externalities fall as a result of increases in work effort, quality of life will also decline. Thus it could be argued that it is both the fall in quality of life brought about by increasing environmental disamenity and the fall brought about by diminished social networks that are working together to bring about the phenomenon of increasing work effort in the face of rising real incomes. Nonetheless, it is more likely that individuals would connect their increased work effort with the loss of this positive externality than they would connect it with the rise in negative externalities associated with environmental disamenity. In this paper we look only at the adverse environmental effects of excessive work effort.)

The hypothesis being put forward here, then, is that, all other factors remaining constant, declining quality of life over time encourages increased work effort through the income (in this case quality of life) effect. This additional work effort occurs on top of the already excessive level of work effort brought about in the short term because of workers' ignorance of, or refusal to act upon, the environmental costs of their work and consumption which causes them to substitute work for leisure to too great an extent. Furthermore, and more importantly, these longer hours of work aggravate environmental damage and congestion resulting in further increases in compensatory work effort. Thus there is a vicious circle of overwork and over consumption. This vicious circle, which is the manifestation of a classic market failure in the form of negative production and consumption externalities has important implications for policy.

Policy Implications

The extent of environmental regulation designed to reduce the ill-effects of environmental degradation and so increase quality of life grows exponentially. If such regulation were sufficient to actually turn around the decline in quality of life that has accompanied real GDP growth in recent decades so that both were on an upward path (like they were in the 50s and 60s) an increase in leisure could be expected.

Unfortunately, the track record is not good: the increased regulation since that time has been inadequate to the task of actually raising quality of life. Furthermore, if the future adverse effects of global warming are as devastating as an increasing number of commentators expect them to be, the future situation can only worsen: increased pressure will be placed on our

leisure time as we work harder and harder in an endeavour to compensate for ever declining quality of life. (Furthermore, if that increased work effort reduces positive social network externalities, quality of life will decline even further and there will be an even greater tendency to work excessively.)

If regulation designed to improve environmental outcomes is inadequate to the task, what can be done? Certainly the attempts to improve environmental amenity through regulation must continue and be strengthened. However, limits to the efficacy of such regulation suggest that more draconian measures must be pursued. Public education campaigns have been used for centuries in, often successful, attempts to mitigate the effects of market failures. In the current environment in many English speaking countries where public education is directed squarely at increasing work hours and participation rates, the pursuit of a campaign encouraging a reversal of these behaviours could have significant success. Another solution would be to mandate decreases in work hours. If such a policy could be successfully implemented it would, of course, require a concomitant decrease in real remuneration to prevent increases in real wages and an ensuing increase in unemployment. Although a decrease in real wages may be unpalatable for labour, the net effect of such a solution would, nonetheless, be for increased environmental amenity to more than compensate for the fall in real income with the result that there would be a net increase in quality of life. This is a straightforward solution that would extend the existing regulation of the labour market and, in Australia's case, reverse some of the 'Liberalization' that has occurred in recent years. Mandated decreases in work hours occurred throughout the first three quarters of the twentieth century in most developed countries; there is every reason for this process to continue in the twenty first in English speaking countries as it has in many parts of continental Europe. Finally, it is important to ensure that policies designed to reduce work effort have a long-term focus and are

implemented slowly over time to allow the economy to adjust smoothly to lower, but sustainable, levels of production and consumption

Another way of tackling the problem is for society to embark on projects that improve environmental outcomes – positive externality generators. Typically, because the benefits of such projects are shared by all rather than being captured by the producer, these activities would need to be subsidized by the state: they have a strong public good element. An increase in work effort channelled into these activities would, because they have side effects that benefit the whole community, result in workers collectively receiving a supplement to their work-related income (see Boyce, 2002). Because these are side effects that constitute benefits of work which are not taken into account when making decisions about the amount of work effort to engage in, we would be undertaking less work than we should in these types of employment. The net effect of increasing the scope of these activities would be a reduction in the economy-wide level of excess work effort and an improvement in environmental amenity. Already governments are engaging in a limited range of these activities which include, for example, restoration of wetlands, restocking of fisheries, and environmental education. That said, there is a political limit to the degree to which governments can extend their involvement in these activities since any such extension is likely to involve higher levels of taxation and government expenditure.

The economies of the developed world are increasingly becoming centred on service industries. The world's richest nations typically have service sectors that constitute more than 60% of GDP. An oft noted characteristic of service industries is that they are generally less environmentally malignant than the goods-producing (manufacturing) industries which they have progressively replaced in the West over the past half century (See, for example,

Panatayou quoted in Galeotti, 2003). Indeed, Rosenblum, et al have estimated that the adverse environmental impact of service industries in the US is typically one third to one half of the effect of manufacturing (Rosenblum, 2000). This, inter alia, may help explain why pollution per dollar of GDP has been declining in developed countries but increasing in developing countries where manufacturing has increased as a proportion of GDP. An obvious way of reducing the adverse side effects of work effort would be to increase employment in the service industries at the expense of manufacturing. This could be achieved through a system of taxes and/or subsidies that advantage the service industries in relation to manufacturing. A disadvantage of pure-form value added tax systems, which are now widespread and which are from time to time mooted for the US, is that they treat all industries alike. Any move to use taxes or subsidies to advantage service industries over manufacturing would involve differential taxes and would be part of the wider “green tax” agenda involving an increase in taxes on, and revenues from, polluting activities which is compensated by a fall in taxes on, and revenues from, “clean” activities.

Clearly, there are many ways in which current environmental problems can be tackled; a holistic approach involving less work and more leisure should be an integral part of the policy approach. Not only would it improve the natural environment but it would also bring the added benefit of realization of the leisure society that was foreshadowed three and more decades ago.

Conclusion

An economically convincing explanation for overwork and loss of work-life balance in contemporary society seems to have eluded researchers. Increases in work effort in recent

decades that intuitively seem to be at the heart of the problem may be rational, welfare maximizing responses to changes in factors that determine levels of work effort. Nonetheless, it may still be the case that the absolute level of work effort undertaken by individuals is excessive. The explanation offered here for this situation involves the application of economic theory to market failure in the form of negative environmental externalities which are caused by work and consumption and which should be, but are not, accounted for when individuals make choices about how to allocate their time between work and leisure. This explanation also provides a basis for policies that could not only give rise to a significant reduction in environmental deterioration but that could also make the realization of the leisure society more likely.

References

- Alesina, A., Glaeser, G. and Sacerdote, B. (2005), "Work and Leisure in the U.S. and Europe Why so Different?", Harvard Institute of Economic Research Discussion paper 2068, April.
- Bryant, Arthur (1958), *The Age of Elegance*, Penguin, Harmondsworth.
- Beder, Sharon (2000), *Global Spin*, Scribe Publications, Melbourne.
- (2000), *Selling the Work Ethic*, Scribe Publications, Melbourne.
- Boyce, James K. (2002), *The Political Economy of the Environment*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- Bryson, Bill (2001), *Down Under*, Black Swan, London.
- Bunting, Madeleine, (2004), *Willing Slaves*, HarperCollins, London.

Cameron, David, (2006) general well-being speech at http://www.conservatives.com/tile.do?def=news.story.page&obj_id=131047 accessed 30/5/07.

Cross, G., (1993), *Time and Money*, Routledge, London.

Diamond, J., (2005), *Collapase*, Allen Lane, Camberwell.

Douthwaite, R., (1999), *The Growth Illusion*, New Society Publishers, Gabriola Island.

Duany, A., Plater-Zyberk, E. and Speck, S., (2000), *Suburban Nation*, North Point Press, New York.

Easterlin, Richard A., (1974), 'Does Economic Growth Improve the human Lot? Some empirical Evidence', in David, P.A. and Reder, M.W., eds, *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*, Academic Press, New York, pp. 89-125, reproduced in Easterlin, Richard A., (2002), *Happiness in Economics*, Edward Elgar, Cheltenham.

----- (2002), *Happiness in Economics*, Edward Elgar, Cheltenham.

Frank, R. H., (1985), *Choosing the Right Pond: Human Behaviour and the Quest for Status*, Oxford University Press, New York.

Gordon, R. J., (2002), "Two Centuries of Economic Growth: Europe Chasing the American Frontier", Economic History Workshop, Northwestern University, October.

Galeotti, M, (2003) "Economic Development and Environmental Protection", Fondazione Eni Enrico Mattei Working Paper N.89.

Hayden, Anders, (1999) *Sharing the Work, Sparing the Planet*, Zed Books, London.

Heath, J., (1999), "The structure of hip consumerism", at http://www.chass.utoronto.ca/philosophy/twp/9903/twp_99_03_heath.html accessed 29/5/2007.

Kahneman, Daniel, (2002), "Maps of Bounded Rationality: a Perspective on Intuitive Judgement and Choice", Nobel Prize Lecture, at <http://www.nobel.se/economics/laureates/2002/kahnemann-lecture.pdf>

Kennedy, John F., (1963) Speech at Amherst College, Massachusetts to praise American poet Robert Frost, 27 October at http://www.cc.gatech.edu/people/home/idris/Speeches/kennedy_frost.htm accessed 16/7/2004

Layard, Richard, (2005), *Happiness*, Penguin, New York.

Leacock, S., (1944), *How to Write*, John Lane The bodley head, London.

Mandeville, Thomas, (1795), *The Fable of the Bees*, Allen and West, NO. 15. Pater Noster Row.

Nordhaus, W.D. (2000), "New Directions in National Economic Accounting", *American Economic Review*, vol. 90, no. 2, May, 2000, pp. 259-263.

Pocock, Barbara, (2003), *The Work/Life Collision*, Federation Press, Sydney.

Prescott, E. C., (2004), "Why do Americans Work so Much More than Europeans?" *Federal Reserve Bank of Minneapolis Quarterly Review*, no. 28, July, pp. 2-13.

Putnam, R.D., (2000), *Bowling Alone*, Simon & Schuster, New York.

Relationships Forum (2007), "An Unexpected Tragedy", Sydney.

Reich, Robert B., (2002), *The Future of Success*, Vintage, USA.

Rosenblum, J., Horvath, A., Hendrikson, C., (2000), "Environmental implications of service industries", *Environmental science and technology*, vol. 34, no22, pp. 4669-4676.

Robinson, Tim, (2006), *Work, Leisure and the Environment*, Edward Elgar, Cheltenham.

Schor, Juliet, (1997), "Civic engagement and working hours: do Americans really have more free time than ever before?", Conference on Civic Engagement in American Democracy, Portland Maine, 26-28 September at <http://www.swt.org/putok.htm>. accessed 16/7/04.

----- (1992), *The Overworked American*, Basic Books, New York.

----- (1991), "Global Equity and Environmental Crisis: An Argument for Reducing Working Hours in the North", *World Development*, vol. 19, no. 1, pp.73-84.

Shields, M.P., & Shields, G. (2006) "The Response of Working hours to Health Care Costs in the US: An Employer's Response to Rising Fixed Cost", Economics Department working Paper, Central Michigan University.

Stigler, G.J. and Becker, G.S. (1977), "De Gustibus Non Est Disputandum", *American Economic Review*, Vol. 67, No. 2, pp. 76-90.

Thompson, E. P., (1967), "Time, Work-discipline, and Industrial Capitalism", *Past and Present*, no. 38, pp. 56-97.

----- (1963), *The Making of the English Working Class*, Penguin, London.

Thurow, Lester, (1985), *The Zero-Sum Solution*, Simon & Schuster, New York.

enetoulis, J., Chazan, D. and Gaudet, C., (2004), "Ecological Footprint of Nations", *Redefining Progress*, Oakland, California.

York, R., Rosa, E. A. and Dietz, T., (2003), "STIRPAT, IPAT and ImPACT: analytic tools for unpacking the driving forces of environmental impacts", *Ecological Economics*, no. 46, pp. 351-365.