

The Temporal Welfare State: A Crossnational Comparison*

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Abstract: Welfare states contribute to people's well-being in many different ways. Bringing all these contributions under a common metric is tricky. Here we propose doing so through the notion of 'temporal autonomy': the freedom to spend one's time as one pleases, outside the necessities of daily life. Using surveys from four countries — Australia, France, Germany, and Sweden — that represent the principal types of welfare regime, we propose ways of operationalising the time that is 'strictly necessary' for people to spend in paid labour, unpaid household labour, and personal care; the residual, 'discretionary time', represents people's temporal autonomy. We measure the impact on this of taxes, transfers, and childcare subsidies in these four countries. In so doing, we calibrate the contributions of the different welfare-gender regimes that exist in these countries, in ways that correspond to the lived reality of people's daily lives.

I. Introduction

In assessing the varying impacts of different countries' welfare states, it would be frightfully handy if actually we had some direct measure of people's welfare. Alas, we do not. All we have are more-or-less indirect indicators. Income, familiarly, is one. Time, we suggest, could be another.¹

Welfare-state researchers commonly use people's income as a proxy for welfare. They do so knowing it is not a perfect proxy. How much welfare

¹ 'Happiness' — measured in the now-conventional way by responses to surveys asking people, 'All things considered, how is your life going these days?' — is yet another (Frey & Stutzer 2002a,b; Layard 2005). In a companion paper, we explore the impact of 'discretionary time' on that as well (Eriksson, Rice and Goodin 2005).

people derive from their income obviously depends on how they spend it – and, indeed, on whether they spend it. Income is, at most, a measure of ‘potential welfare’ (Ringgen 1988). A millionaire who is so miserly that she ends up starving is nonetheless counted as ‘rich’, however poor her diet. She is counted as ‘rich’ by virtue of her ‘command over resources’, regardless of her actual consumption of resources.

Many of the same things that are said to justify treating income as a proxy for welfare could equally well be said for treating time as a proxy for welfare. Time and money are conjoined in the production function for welfare, just as labour and capital are conjoined in the production function for commodities. It takes money to buy goods, but it takes time to consume them. Time is an important resource – arguably, the ‘ultimate scarce resource’ (Zeckhauser 1973) – required for producing welfare. Having more command over time increases your potential welfare: being ‘richer’ in time terms increases your ‘potential welfare’ in ways strictly analogous to the ways in which being richer in money terms does. Of course, as with income so too with time, how much welfare people derive depends on how they spend it. But whether one is counted as ‘rich’ or ‘poor’, in terms of time just as in terms of money, ought be seen to depend on one’s ‘command over resources’, not on one’s ‘consumption of resources’.

Here we operationalize the notion of ‘command over time’ through a notion of ‘discretionary time’, constructed on the basis of time-use surveys.² This is related to, but importantly different from, the conventional time-use category of ‘free time’. The latter is a function of how much time people actually spend in paid labour, unpaid household labour and personal care; ‘free time’ is in that respect more akin to a measure of one’s ‘consumption’ of the resource of time. ‘Discretionary time’ is a function of how much time people strictly need to spend in those activities. Measuring as it does the extent to which their allocation of time is not dictated by strict necessity, ‘discretionary time’ is an indicator of people’s ‘control’ over the resource of time.

We will elaborate those concepts and describe their operationalization in Section IV. Then we turn to data from four countries — Australia, France, Germany and Sweden — to illustrate their usefulness as measures of the varying impact of welfare states of very different sorts. Sweden is a classically social-democratic welfare state (albeit under a rare period of conservative rule during the period covered by our data); Australia is a classically liberal welfare state; and France and Germany are classically corporatist welfare states. Furthermore, each welfare regime is associated with a distinct gender and family regime (elaborated in Section II). The tax-transfer and child-care policies derived from those regime imperatives are shown in Sections V to VII

² Precursors are found in Goodin et al. (2004; 2005): we stand by the rationales offered there, although over the course of this evolving project some of the finer points of methodology have changed.

to impact strongly and differentially on the amount of ‘discretionary time’ — on people’s control over the resource of time — in each of those countries.

II. Regime Imperatives: Welfare, Gender, Family

Welfare-state researchers typically talk of the ‘three worlds of welfare capitalism’ (Esping-Andersen 1990; cf. Titmuss 1974; Castles 1998; Goodin et al. 1999). Of course there are important variants within each of the three major clusters; of course there are important cases that do not fit within any of them (Castles & Mitchell 1992). Still, the basic features of the main ‘three worlds’ are settled, fixed points for orienting comparative welfare state studies. And while the corresponding gender and family regimes overlap those welfare regimes only imperfectly, there are some general patterns that do nonetheless stand out (Lewis 1992; Gauthier 1996; Sainsbury 1996; Esping-Andersen 1999, ch. 4; O’Connor, Orloff and Shaver 1999; Korpi 2000).

The liberal regime, exemplified by the United States and (in our study) Australia, is a residualist welfare regime. The main mechanism for promoting people’s welfare, in a liberal regime, is the capitalist economic market. The liberal state is classically relegated to a ‘nightwatchman’ role, safeguarding the conditions of free exchange and fair competition and correcting market failures. Poor relief in a liberal regime is a matter of charity, a religious duty initially now assumed by the state. Categorical benefits, sometimes of a

moderately generous sort, go to those (such as the old, the young, the disabled) who are excused from paid labour as a matter of public policy. Otherwise, however, liberal welfare benefits are targeted tightly on the poor and only the poor, and they are paid at a rate only barely adequate to alleviate the worst of their distress, for fear of creating disincentives to people engaging in paid labour.

Liberalism's approach to family and gender is dominated by the stark individualism lying at that ideology's core. Liberal regimes of course intervene with anti-discrimination legislation to prevent anti-competitive practices in the labour market; but that is in aid of a larger policy of being assiduously gender-blind. And while the poverty of lone mothers is addressed as a matter of 'poor relief', liberals basically regard the family as falling decisively on the 'private' side of the public-private dichotomy, unfit as the subject for any substantial public intervention.

The corporatist regime, exemplified by Germany and other states of Continental Europe (including France, in our study), is a 'conservative' welfare regime (van Kersbergen 1995). Society is seen as a cooperative venture, with various groups (labour and capital, men and women, etc.) each having their distinctive role to play. The task of corporatist social policy is to underwrite social cohesion and social stability. Social benefits are typically earnings-related and hence status-preserving. Fiscally, corporatist regimes tend to engage in a substantial amount of 'churning', giving back to people in benefits roughly what they take from them in taxes.

The family, and traditional gender roles within it, has historically been lynchpins of corporatist social thinking. The male's role in a classically corporatist society is that of breadwinner for the family as a whole; the female's role is that of homemaker. Marriage and child-bearing are strongly encouraged. Lone motherhood is strongly discouraged.

The social democratic regime, exemplified by the Sweden and other countries in Scandinavia, is a highly egalitarian welfare regime. Characterized by class politics and socialist economics, social democratic regimes strive toward social equality in a multitude of ways (Korpi 1983). One is through macroeconomic management, promoting high levels of employment and earnings. Another is through redistributive taxes and generous public benefits, typically of a universal, flat-rate sort.

The egalitarianism of social democrats extends to their approach gender relations as well. They strive to bring women into the paid labour force fully on a par with men, with public employment as one major mechanism. Partly in furtherance of that, social democrats typically provide a generous system of public care for children of pre-school age. More generally, social democratic family policy is strongly oriented toward the interests of 'the next generation', and provides myriad forms of support to children and their carers out of a combination of egalitarian and pronatalist concerns.

Some features are commonly present in welfare states across all three regimes. Each, for its different reasons, strives to provide some kind of social safety net for those who are especially disadvantaged. This is seen by liberals

as a matter 'poor relief', by corporatists as a way of manifesting and promoting 'social cohesion', and by social democrats as an expression and instrument of 'social equality'. Whichever the rationale, redistributing towards the bottom is a common feature across all three welfare regimes.

So too is a concern with freedom and autonomy, although once again the meaning of those terms vary. The freedom liberals promote is the 'negative liberty' of free markets: freedom from purposive intervention by particular others in one's affairs. What liberals see as 'freedom to choose' (Friedman & Friedman 1980) socialists deride as 'freedom to lose' (Roemer 1988). What social democrats promote is not 'freedom from' but rather 'freedom to', by providing people with the resources that would allow them actually to implement their choices. Corporatists see freedom in more Hegelian terms, in which people are freed to realize their true nature as fundamentally social beings.

III. Measuring Welfare

Welfare is a vague term, of course, meaning different things to different people over the years. The most commonly used measures of welfare are those based on income — per capita GDP, for example, or post-government household income adjusted by equivalence scales in order to take into

account economies of scale in consumption and the differing needs of households of different sizes.

Welfare, however, derives not only from money but also from time. Because of this, welfare has sometimes been investigated through studies of the incidence and distribution of free time and leisure. At the theoretical level, free time and leisure are usually conceptualised as those activities for which the direct pleasures of performing the activity (that is, the direct pleasures) are greater than the subsequent pleasures indirectly made possible by the changes performing the activity brings about in the state of the world (that is, the indirect pleasures) (Hawrylyshyn 1977; Juster, Courant, and Dow 1985).

At the empirical level, free time and leisure are usually operationalised in a cruder manner, as those activities for which — by and large — the direct pleasures are greater than the indirect pleasures. So, the number of hours of free time per week could be measured as follows.

free time = 168

- actual time in paid labour
- actual time in unpaid household labour
- actual time in personal care

This measure of free time treats actual time in paid labour, unpaid household labour, and personal care as time in relation to which, by and large, the direct pleasures are less than the indirect pleasures.

What is true by and large, however, is not what is always true. Time spent in paid labour can sometimes yield more direct pleasure than indirect pleasure; and the same is true of time spent in unpaid household labour and personal care. In other words, in some cases paid labour, unpaid household labour, and personal care should be treated as instances of free time or leisure, while in other cases these activities should not be treated as instances of free time or leisure. Ideally, a measure of free time would be able to distinguish two components within actual time in paid labour, unpaid household labour, and personal care — one component that is an instance of free time or leisure and another component that is not.

Because welfare derives from both monetary and temporal sources, a measure of welfare would ideally incorporate information on both of these kinds of things. The construction of more inclusive measures of this kind have, of course, been attempted. Most prominent among these efforts has been the construction of measures of ‘full income’, which assign monetary values to non-monetary items — such as leisure time and time spent in unpaid household labour — and then add the assigned monetary value of these items to an income measure to yield ‘full income’ (Beckerman 1978; Travers and Richardson 1993; OECD 1995; Holloway et al. 2002; Abraham and Mackie 2005). In this way, these measures combine information on income with information on time use to yield more inclusive measures of welfare that are measured in a monetary metric.

In this paper, we adopt a different tact. We construct a measure of welfare that incorporates information on income and information on time use, but which is measured on a temporal rather than a monetary metric. The welfare measure we develop is an autonomy-based measure. In more specific terms, it is a welfare measure that is fundamentally based on the concept of ‘temporal autonomy’. To refer to our measure of ‘temporal autonomy’, we adopt the term ‘discretionary time’.

A person enjoys ‘temporal autonomy’ to the extent that he or she has time during which he or she is free to choose the activities in which he or she participates. The time during which a person is free to choose his or her activities is, of course, restricted by a variety of factors. Most important in this regard is that everyone is compelled to spend some time in the various necessary activities of everyday life. Everyone needs to spend some time in personal care (eating and sleeping, for example) and most people need to spend some time in paid labour and unpaid household labour as well. Our measure of temporal autonomy, ‘discretionary time’, is designed to capture compulsion and necessity in these three arenas of everyday life — paid labour, unpaid household labour, and personal care. A person’s discretionary time, as we define it, is the time that person has during which he or she is not compelled to participate in paid labour, unpaid household labour, and personal care. In other words, it is the time that person has at his or her disposal after taking into account the time he or she needs to spend in paid

labour, unpaid household labour, and personal care. Hence, we define the number of hours of discretionary time per week as follows.

discretionary time = 168

- necessary time in paid labour
- necessary time in unpaid household labour
- necessary time in personal care

This definition of discretionary time is morphologically very similar to the measure of free time mentioned earlier. Both of these focus on the time a person has at his or her disposal after taking into account time in paid labour, unpaid household labour, and personal care. The difference is that, where the measure of free time focuses on the time a person actually spends in these three activities, the definition of discretionary time focuses on the time a person needs to spend in these activities. To our minds, this difference between discretionary time and free time makes evident the clear superiority of discretionary time as a measure of welfare.

Consider a monetary analogy. Calling someone 'time-poor' (Vickery 1977; Schorr 1991; 2000) by virtue of the small amount of time she has left over after all the time she actually spends in paid labour, unpaid household labour and personal care is rather like calling a spendthrift millionaire 'money-poor' by virtue of the small amount of money she has left over after all the money she actually spends on the best, and most expensive, in food,

clothing, and shelter — dinner at exclusive restaurants, designer outfits, mansions, and such like. But surely that is absurd. A better approach would be to assess the millionaire's welfare on the basis of the money she has at her disposal after taking into account what she needs to spend on food, clothing, and shelter. As with money, so too with time: a person's welfare could be measured on the basis of the time that person has at his or her disposal after taking into account the time he or she actually spends in paid labour, unpaid household labour, and personal care. But a better approach would be to measure a person's welfare on the basis of the time that person has at his or her disposal after taking into account the time he or she needs to spend in these three activities.

The task of developing an empirical operationalisation of the theoretical definition of discretionary time just described will be taken up in the following section. In particular, the task of operationalising necessary time in paid labour, unpaid household labour, and personal care will be confronted. It is worth pointing out here, however, that one would expect necessary time in paid labour, unpaid household labour, and personal care to be less than actual time in these three activities, at least generally speaking. Of course, it is always possible for any given person to spend less time than necessary in paid labour (thus having a below-poverty income); less time than necessary in unpaid household labour (thus having a filthier house than socially acceptable); or less time than necessary in personal care (thus being sleep-deprived). But it would be highly unlikely for most people to actually

spend less time in paid labour, unpaid household labour, and personal care than they need to spend — especially in relatively privileged societies like Australia, France, Germany, and Sweden. It would be more likely, generally speaking, for people to actually spend more time in paid labour, unpaid labour, and personal care than they need to spend. Indeed, an operationalisation of necessity that resulted in most people falling below what is deemed necessary could be seen as embodying a distinctly strange notion of necessity.

Because necessary time in paid labour, unpaid household labour, and personal care are likely to be less than actual time in these activities, at least in general, identifying necessary time in these activities does provide a way in which two components can be distinguished within actual time in paid labour, unpaid household labour, and personal care — one component that is necessary and another component that is not necessary, or which is discretionary. The extent to which this distinction matches the distinction mentioned earlier — between a component that is an instance of free time or leisure and another component that is not — would be an interesting question for future research.

As will become clearer in the following section, discretionary time is a measure of welfare that incorporates information on both income and time use. It is also a measure of welfare that is measured on a temporal rather than a monetary metric. As metrics of welfare, temporal metrics do have advantages over monetary metrics. Most significantly, temporal metrics are

much more comparable across time and space than are their monetary counterparts. The meaning an hour has for an Australian in 1989 is likely to be similar to the meaning an hour has for a German in 1994, generally speaking. These meanings may not be identical, but the contrast between temporal metrics and monetary metrics in this respect is stark. Generally speaking, one hundred 1989 Australian dollars is likely to mean something to an Australian in 1989, but is unlikely to mean anything to a German in 1994.

We turn now to the task of developing an empirical operationalisation of the theoretical definition of discretionary time just described.

IV. Operationalising the Key Variables: Methods and Data Sources

A. Data Sets

In order to operationalise discretionary time in the four countries under investigation here, two multinational data sets have been used: the Luxembourg Income Study (LIS) and the Multinational Time Use Study (MTUS). Both the LIS and the MTUS collect together, harmonise, and standardise surveys from a range of countries and years for the purpose of facilitating comparative research. The purview of these two multinational data sets is different, however: the LIS focuses on income surveys, while the focus of the MTUS is time use surveys. More information about these data

sets can be found at their respective websites (www.lisproject.org and www.iser.essex.ac.uk/mtus).

The MTUS was the original source for all of the time use variables used in the analyses presented in this paper. Free time was calculated on the basis of the MTUS alone. The MTUS was also the source of the basic parameters used in the calculation of necessary time in unpaid household labour and necessary time in personal care. These parameters were then used to calculate necessary time in unpaid household labour and personal care for the observations contained in the LIS.

The analyses presented in this paper did not use all of the surveys collected and harmonised in these two multinational data sets. Indeed, not all of the surveys contained in these data sets included sufficient information to be usable for our purposes. An even more select group of surveys had a usable counterpart in the other dataset that was conducted at more or less the same time. The specific surveys used in the analyses that follow are listed in Table 1.

[Table 1 about here.]

Table 1: Income and time use surveys

	Years to which income and time use data relate	Source
Australia		
1990 Survey of Income and Housing Costs and Amenities	1989	LIS
Time Use Survey Australia 1992	1992	MTUS
France		
Household Budget Survey 1995	1994	LIS
Time Use Survey	1998/1999	MTUS
Germany		
German Socio-Economic Panel	1994	LIS
1991/92 Time Budget Survey of the Federal Republic of Germany	1991/1992	MTUS
Sweden		
Income Distribution Survey	1992	LIS
Time Use Survey 1990/1	1990/1991	MTUS

Source: The LIS and the MTUS.

B. Sample Restrictions

For the purposes of this paper, two separate samples were used.

The first sample, Sample A, consisted of all households. This sample was used in the calculation of various figures relating to notions of necessity — the poverty line, necessary time in unpaid household labour, and necessary time in personal care.

The second sample, Sample B, was restricted to households that included either: (1) a husband and a wife who were both aged between 25 and 54 years, who did not live with any other adults, and at least one of whom was an earner; or (2) a single man or woman who was aged between 25 and 54 years, who did not live with any other adults, and who was an earner. The households could either include children or not include children. The results reported in this paper are based on this sample, as are certain steps in the calculation of necessary time in paid labour.

C. Necessary Time in Paid Labour

Everyone needs to access income, whether through paid labour, property ownership, occupational pensions, the welfare state, private charitable organisations, relatives, or some other source. Exactly how much income people need to access is a controversial issue. In this paper we adopt a standard, if conservative, figure as the amount of income people need to access — namely, the poverty line.

We define the poverty line in the conventional way, as 50 per cent of median equivalent income across all people. A person's equivalent income is calculated by dividing the household income of that person's household by an equivalence scale, for which we have used the square root of the number of people in the household.

As is standard, when calculating the poverty line we operationalise household income as post-government household income, that is, household income net of the impact of the welfare state. So, for example, we calculate the poverty line on the basis of household income net of welfare state taxes and transfers.

The impact of the welfare state is not confined to taxes and transfers, however. Through dissimilar policies relating to childcare, welfare states in different countries can have divergent effects on the cost of childcare faced by households. With this in mind, we make one further adjustment to household income, namely, we estimate household income net of household childcare costs. Unfortunately, since most of the surveys we used did not contain information on household childcare costs, we were forced to impute these costs. The procedure we adopted was to, firstly, determine the number of hours actually spent in paid labour by the adult in the household who actually spent the least time in paid labour. We then estimated household childcare costs for children aged 2 years or less by multiplying this number of hours in paid labour by the product of the number of children aged 2 years or less in the household and the hourly cost of childcare for children of this age

group. Household childcare costs for children aged between 3 and 5 years were estimated by multiplying this number of hours in paid labour by the product of the number of children aged between 3 and 5 years in the household and the hourly cost of childcare for children of this age group. Household childcare costs, lastly, were estimated by adding together household childcare costs for these two age groups of children. Of course, household childcare costs were estimated to be zero if there was an adult in the household who actually spent no time in paid labour, if there was no child in the household, or if the hourly cost of childcare was zero. Figures for the hourly cost of childcare are hard to come by — especially figures that are comparable across a range of countries and years. How we came upon the figures we used will be briefly outlined in Section F.

In order to meet the poverty line, then, a household needs enough total income to give its members equivalent incomes equal to the poverty line. The amount of total income a household needs in order to do this is equal to the poverty line multiplied by the equivalence scale, which in our case is equal to the square root of the number of people in the household.

One of the ways in which a household can acquire the income it needs is through paid labour. However, this is not the only way. Alternative sources of income include property ownership, occupational pensions, welfare state taxes and transfers, transfers from private charitable organisations, transfers from relatives, child support, and alimony. In order to meet the poverty line, the amount of income a household needs to acquire through paid labour

specifically — or the household's necessary paid labour income — is equal to the amount of total income it needs minus the amount of income it would receive from alternative sources, such as property ownership, occupational pensions, welfare state taxes and transfers, transfers from private charitable organisations, transfers from relatives, alimony, and child support, if it was around the poverty line.

A household that receives a certain amount of income from property ownership and occupational pensions is likely to continue receiving this income even if the equivalent incomes of its members were to move closer towards the poverty line. If the members of a household were to change the time they spend in paid labour, for example, the amount of income the household receives from property ownership and occupational pensions is unlikely to be markedly affected. Consequently, for our purposes the appropriate figure to use for the amount of income a household would receive from property ownership and occupational pensions is simply what the household actually receives from these sources.

The same is not necessarily true, however, for welfare state taxes and transfers, transfers from private charitable organisations, transfers from relatives, child support, and alimony. The amount of income a household receives from these sources might very well change if the equivalent income of its members were to move closer towards the poverty line. Consequently, for our purposes the most appropriate figure to use for the amount of income a household would receive from these sources is not what the household

actually receives, but rather what similar households around the poverty line receive.

We thus determined the mean amounts of income from these sources that were received by households that were around the poverty line (that is, households whose members had equivalent incomes between 25 and 75 per cent of median equivalent income across all people) and that were similar to the households on which the following analyses focus (that is, households that were part of Sample B described earlier).

For welfare state taxes and transfers, transfers from private charitable organisations, and transfers from relatives, we calculated separate means for four different groups of households within the sample, with the aim of capturing some of the variation that exists in the allocation of income from these sources. We first distinguished households with at least one child from those with no child. Among households with at least one child, we then further distinguished between single earners, two-earner couples, and one-earner couples. Unfortunately, it was not possible to make these further distinctions among households with no child, because of small numbers of observations. The figure used for the amount of income a household would receive from these sources if it was around the poverty line was set to the mean for whichever of the four different groups the household would belong to.

For child support and alimony, we calculated separate means for two different groups of households within the sample: those that received child

support or alimony and those that did not (although for those that did not receive child support or alimony, the mean was of course zero). It was not possible to make any further distinctions, because of the small number of observations that received child support or alimony. The figure used for the amount of income a household would receive from these sources if it was around the poverty line was set to the mean for households that received child support or alimony if the household actually did receive child support or alimony. If the household actually did not receive child support or alimony, this figure was set to the mean for households that did not receive income from these sources (that is, it was set to zero).

The income a household would receive from these alternative sources if it was around the poverty line is deducted from the total income it needs in order to meet the poverty line to yield the household's necessary paid labour income. How much income each member of the household needs to acquire through paid labour was determined in the following way. Firstly, children in the household were assumed to have negligible responsibility for the household's necessary paid labour income. Secondly, the proportional responsibility that each adult in the household has for the household's necessary paid labour income was taken to be equal to the proportion that he or she contributes to the total earnings actually received by all the adults in the household combined (earnings being income from wages, salaries, and self employment). So, how much income each member of the household needs to acquire through paid labour was, for children, equal to zero and, for

adults, equal to the household's necessary paid labour income multiplied by the adult's actual earnings relative to the total earnings actually received by all the adults in the household combined.

The time a person needs to spend in paid labour, or the person's necessary time in paid labour, (a temporal value) was calculated by dividing the amount of income that person needs to acquire through paid labour (a monetary value) by that person's wage rate (that is, the person's earnings divided by the hours he or she spends at work).

Of course, the amount of income a person needs to acquire through paid labour, as just described, is the amount of income a person needs net of household childcare costs. The adults in a household will need to acquire more income through paid labour if their household incurs childcare costs, with the result that necessary time in paid labour among these adults will increase. When calculating a person's necessary time in paid labour, we took into account the additional time a person might need to spend in paid labour in order to meet his or her responsibilities in relation to household childcare costs. Household childcare costs were estimated in the same way as described earlier, except that these costs were indexed to necessary time in paid labour rather than time actually spent in paid labour. A person's proportional responsibility for household childcare costs was calculated in the same way as a person's proportional responsibility for his or her household's necessary paid labour income.

D. Necessary Time in Unpaid Household Labour

We estimate the time a person needs to spend in unpaid household labour, that is, a person's necessary time in unpaid household labour, in a manner that is strongly based on the conventional way of calculating — by way of the poverty line — the amount of income people need to access.

We firstly calculated the total amount of time actually spent in unpaid household labour by all the people in a person's household combined. In order to take into account economies of scale in consumption and the differing needs of households of different sizes, we then divided this amount by an equivalence scale, for which, as earlier, we used the square root of the number of people in the household. In this way, we estimated a person's 'equivalent unpaid household labour time'. We then calculated 'poverty lines for unpaid household labour' for each of four groups of people within the sample, with each 'poverty line for unpaid household labour' being defined as 50 per cent of median 'equivalent unpaid household labour time' across all of the people within each group.

In the determination of necessary time in paid labour, we attempted to take into account the cost of childcare faced by households. However, if a household is paying somebody outside the household to take care of its children, it will need to spend less time in unpaid household labour than it otherwise would. With this in mind, separate 'poverty lines for unpaid household labour' were calculated for four groups of people that were likely

to vary in terms of their use of childcare. We first distinguished people in households with a child aged 4 years or less from people in households without a child in this age group. We then further distinguished between people in households in which all the adults spent some time in paid labour from people in households in which at least one of the adults spent no time in paid labour.

The total amount of time all the people in a person's household combined need to spend in unpaid household labour — or the household's necessary time in unpaid household labour — is equal to the relevant 'poverty line for unpaid household labour' multiplied by the equivalence scale, which in our case is equal to the square root of the number of people in the household.

A person's necessary time in unpaid household labour was then determined in the following way. Firstly, children in the household were assumed to have negligible responsibility for the household's necessary time in unpaid household labour. Secondly, the proportional responsibility that each adult in the household has for the household's necessary time in unpaid household labour was taken to be equal to the proportion that he or she contributes to the total amount of time actually spent in unpaid household labour by all the adults in the household combined. So, a person's necessary time in unpaid household labour was, for children, equal to zero and, for adults, equal to the household's necessary time in unpaid household labour multiplied by the adult's actual time in unpaid household labour relative to

the total amount of time actually spent in unpaid household labour by all the adults in the household combined.

E. Necessary Time in Personal Care

Estimating the time a person needs to spend in personal care, that is, a person's necessary time in personal care, could in theory proceed in a manner similar to the conventional way of calculating — by way of the poverty line — the amount of income people need to access. For example, a person's necessary time in personal care could be taken to be equal to 50 per cent of median actual time in personal care across all people. In practice, however, this manner of proceeding is just not plausible. In the four countries under investigation here, median time in personal care ranged from 67.28 hours per week in Sweden to 75.83 hours per week in France. Multiplying median time in personal care by 0.50 would yield figures for necessary time in personal care that ranged from 33.64 to 37.92 hours per week, or 4.81 to 5.42 hours per day. But people surely require more than 6 hours a day to eat, sleep, and engage in other personal care activities.

Here we adopt a very simply procedure for estimating a person's necessary time in personal care. We calculate, firstly, the mean and standard deviation of time in personal care across all people. We then assign each person a necessary time in personal care equal to the mean of personal care time minus one standard deviation in personal care time.

In this paper, then, necessity in paid labour, unpaid household labour, and personal care is interpreted in ways that are relative rather than absolute. In other words, what is necessary in these three arenas of everyday life is a function of social standards, rather than physical requirements.

F. The Cost of Childcare

As mentioned earlier, figures for the hourly cost of childcare are hard to come by. How we came upon the figures we used will be briefly outlined in this section. For each of the four countries under investigation here, we carried out the following procedure.

On the basis of information presented in the OECD publication 'Education at a Glance', we calculated a figure for hourly expenditure on pre-primary education (for children aged 3 years or more) per student in public and private institutions. In the absence of other information, we assumed that this figure was the same as the equivalent figure for children aged 2 years or less.

These estimates relate to the cost of providing these childcare services to children aged 2 years or less and to children aged between 3 years and school age. They do not necessarily relate to the cost of acquiring these services faced by households. This is because the welfare state can subsidise the provision of these services.

The extent of this subsidisation can vary from one country to another. Children aged 2 years or less are entitled to publicly supported early childhood education and care in Sweden, but not in Australia, France, and Germany. Children aged between 3 years and school age are entitled to publicly supported early childhood education and care in France, Germany, and Sweden, but not in Australia. In the countries under investigation here, even if the welfare state does not recognize an entitlement to publicly supported early childhood education and care, some children will nevertheless be enrolled in publicly-financed early childhood education and care. The extent of this enrollment, however, varies from one country to another.

Using information on these kinds of welfare state policies, we estimated the likelihood that a child aged 2 years or less would be enrolled in publicly subsidised childcare. We also estimated the likelihood that a child aged between 3 and 5 years would be in publicly subsidised childcare. The costs of public childcare was considered to be negligible, especially for households around the poverty line. With these things in mind, we attempted to take into account the impact the welfare state had on the cost of childcare by adjusting the hourly cost of childcare for these two age groups of children downwards in line with the likelihood that a child in these age groups would be in enrolled publicly subsidised childcare.

G. Pre-government and Post-government Discretionary Time

Discretionary time is, as mentioned earlier, calculated by subtracting from 168 necessary time in paid labour, necessary time in unpaid household labour, and necessary time in personal care.

So far, however, we have been describing the calculation of post-government discretionary time. Pre-government discretionary time was calculated in a way that bracketed out the impact of government taken into account in the calculation of post-government discretionary time. This was done in three ways.

Firstly, in the calculation of necessary time in paid labour, the amount of welfare state taxes and transfers a household would receive if it was around the poverty line was set to zero.

Secondly, in the calculation of necessary time in paid labour, the hourly costs of childcare were not adjusted downwards in line with the likelihood that a child would be enrolled in publicly supported childcare.

Thirdly, in France and Germany, but not in Australia and Sweden, the number of children aged between 3 and 5 years who were enrolled in publicly supported childcare exceeded the number of children of this age group who lived in households in which there was no stay-at-home adult. This suggests that in France and Germany some children aged between 3 and 5 years were enrolled in publicly supported childcare even though they lived in households with a stay-at-home adult. The fact that these children were enrolled in publicly supported childcare no doubt led to a decrease in the

time spent in unpaid household labour by their households. In the absence of the welfare state, this benefit to these households with a stay at home adult would not exist. In the absence of the welfare state, some households with a stay at home adult will increase their time in unpaid household labour. In order to take this into account, we adjusted pre-government necessary time in unpaid household labour for households with a stay at home adult and a child aged between 3 and 5 years or less accordingly. (We did not make this adjustment in Australia and Sweden, because the number of children in households without a stay at home adult always exceeded the number of children enrolled in publicly supported childcare, thus suggesting that most children with a stay at home adult were not enrolled in publicly subsidised childcare. We did not make this adjustment for households without a stay at home adult, since these households need to access childcare both pre-government and post-government.)

V. Temporal Autonomy across Countries

Table 2 presents means for discretionary time among adults aged between 25 and 54 years in households with at least one earner. 'Pre-government discretionary time' is the amount of discretionary time they would have had in the absence of government taxes, transfers and child-care subsidies; 'post-government discretionary time' is the amount of time they have net of those.

Table 2 lists the means of both of those and the differences between them for each country.

[Table 2 about here]

Mean pre-government and post-government discretionary time increase as one goes down the list of countries in Table 2. Adults in Australia have the lowest levels of discretionary time, while those in Sweden have the highest. The differences are substantial. In Sweden adults enjoy 11.63 hours per week more discretionary time than their counterparts in Australia pre-government, rising to 12.92 hours per week more post-government.

Table 2: Discretionary time among all adults (hours per week)

	Discretionary time		
	Pre-gov't	Post-gov't	Difference
Australia, 1989			
Mean, all adults	64.14	63.70	-0.44
France, 1994			
Mean, all adults	67.68	66.78	-0.89
Germany, 1994			
Mean, all adults	73.21	70.07	-3.14
Sweden, 1992			
Mean, all adults	75.77	76.62	0.84

Sample: Adults aged between 25 and 54 years in households with at least one earner.

Source: Authors' calculations from the LIS and the MTUS.

Of course, those ‘pre-government’ results are themselves strongly shaped by the macro-economic and labour-market policies of the country in question. Those are important aspects of government policy as well, and they are aspects that vary importantly (and systematically) across welfare regimes.³

The impact of the policies of welfare-gender regimes, specifically, on the temporal autonomy of their citizens is measured by the difference between ‘pre-government’ and ‘post-government discretionary time’. In Australia, France, and Germany, the effect of the welfare state is on average to decrease the discretionary time that adults have at their disposal — substantially in Germany, marginally in Australia. The Swedish welfare-gender regime, alone among those represented in this study, actually increases the discretionary time that adults have at their disposal.

Having thus seen the patterns that emerge in relation to temporal autonomy overall, across these four countries and three welfare-gender regimes, we turn now to discuss the impact that they have upon different household types within each country.

VI. Temporal Autonomy within Countries: Overall Patterns

³ Note that on that side of the equation, what seems to matter most is the degree of coordinated wage bargaining (Goldthorpe 1984; Moene and Wallerstein 1995).

A. Discretionary Time, Pre-government and Post-government, versus Free Time

Means for free time and pre-government and post-government discretionary time among men and women aged between 25 and 54 years in households with at least one earner are given in Appendix Table A1. That table also lists means for the difference between post-government and pre-government discretionary time among these men and women. These figures are presented for eight groups of men and women identified on the basis of whether or not the household has at least one child, whether the household is constituted by a single earner, a two-earner couple, or a one-earner couple, and whether the man or woman is an earner or a non-earner.

Focusing on the means for free time and post-government discretionary time, across Australia, France, Germany, and Sweden some cross-nationally consistent patterns clearly emerge. One is that, in all of these countries, the same particular groups of men and women occupy the extreme ends of the distributions of free time and post-government discretionary time. Specifically:

- In all of these countries mothers in two-earner couples have either literally (as in Australia and France) or virtually (as in Germany and Sweden) the least amount of free time.
- In all of these countries non-earning men in childless one-earner couples have the greatest amount of free time, followed by non-

earning fathers in one-earner couples. Non-earning women in one-earner childless couples have the next largest amount of free time, except in Germany where this group of women have slightly less free time than single childless men.

- Single mothers consistently have very low levels of post-government discretionary time. The same is true of mothers in one-earner couples, irrespective of whether the mother is the earner or the non-earner in the couple.
- Men in two-earner childless couples and non-earning men in one-earner childless couples consistently enjoy the highest levels of post-government discretionary time.

The following more general patterns also emerge:

- Non-earning men and women in one-earner couples consistently have more free time than their earning counterparts both in one-earner couples and in the other household types (with the exception of non-earning women in one-earner couples with at least one child in Australia and France). For example, non-earning women in one-earner couples with no child have relatively large amounts of free time in comparison to earning women with no child in one-earner and two-earner couples, as well in comparison to single women with no child.

- Men and women in households with at least one child consistently have less free time than their counterparts in households with no child (with the exception of earning men in one-earner couples in France).
The same is true in relation to post-government discretionary time (with the exception of earning men in one-earner couples in Sweden).
- Men and women in two-earner couples consistently have greater amounts of post-government discretionary time than their counterparts in the other household types.
- Males consistently have more post-government discretionary time than their female counterparts (with the exception of single men and women with no child in Sweden).

On the whole, it is evident that the groups of men and women that have comparatively small amounts of free time are not necessarily the same as those with relatively low levels of post-government discretionary time. Similarly, the groups of men and women with comparatively high levels of post-government discretionary time are not necessarily the same as those with relatively large amounts of free time.

B. Country-specific Impacts of the Welfare-gender Regime

Taking the 'difference between pre-government and post-government discretionary time' as an indicator of the impact of the welfare-gender regime

on the temporal autonomy of its citizens, what does Appendix Table A1 suggest about each of countries and their respective regimes?

The welfare-gender regime in Australia appears to be a welfare-gender regime that has marginal, negative effects on the temporal autonomy of its citizens – with the exception, that is, of highly targeted, positive effects on single parents. The actions of the Australian welfare-gender regime work to increase the discretionary time at the disposal of single mothers by 6.09 hours per week. The discretionary time enjoyed by single fathers is also increased, by 4.63 hours per week. These are the largest, positive effects on single parents found amongst the four welfare-gender regimes under investigation here. Interestingly, the effects that the welfare-gender regime in Australia has on the discretionary time of other groups of adults are in no instances greater in magnitude than the equivalent effects in France, Germany, and Sweden.

The welfare-gender regime in France emerges as one that is characterised temporally by powerful natalist tendencies and the provision of significant levels of support for families, in particular families with only one earner. Without exception, fathers and mothers in France experience more positive impacts on their temporal autonomy as a result of the actions of the French welfare-gender regime than do their counterparts in households with no child. These differences between fathers and mothers and men and women in households with no child are particularly pronounced for those in households with only one earner, that is, single earners and those in one-earner couples. For example, whereas the actions of the French welfare-

gender regime increase the discretionary time at the disposal of single mothers by 4.86 hours per week, they decrease the discretionary time experienced by single women with no child by 3.87 hours per week.

Similarly, while the French welfare-gender regime increases the discretionary time of earners in one-earner couples with at least one child by between 3.64 and 5.37 hours per week, it decreases the discretionary time of earners in one-earner couples with no child by between 3.81 and 4.23 hours per week.

Notably, the French welfare-gender regime also increases the discretionary time experienced by non-earners in one-earner couples with at least one child, while having little impact on the discretionary time experienced by non-earners in one-earner couples with no child. The differences between fathers and mothers and men and women in households with no child are more subdued for those in two-earner couples, although they still operate in favour of fathers and mothers.

The welfare-gender regime in Germany could be characterised, like the French welfare-gender regime, as temporally natalist and supportive of families — but only in a way that is much more selective than in the French case. In Germany, men and women who are single or in two-earner couples face higher state-imposed penalties in terms of temporal autonomy if they have children than if they do not. This is in stark contrast to the situation confronted by men and women in one-earner couples, who face lower state-imposed temporal penalties if they have children than if they do not. Notably, the German welfare-gender regime — like its French counterpart — increases

the discretionary time experienced by non-earners in one-earner couples with children, while having little effect on the discretionary time of non-earners in one-earner couples without children. One the whole, through its impact on the discretionary time experienced by different groups of men and women, the German welfare-gender regime could be said to discourage men and women who are single or in two-earner couples from having children, while at the same time encouraging those in one-earner couples to have children. The German welfare-gender regime could also be said to encourage the formation of couples, since it reserves its highest penalties in terms of temporal autonomy for single men and women, in particular those with children. The actions of the German welfare-gender regime work to decrease the discretionary time single men and women have at their disposal by between 5.64 and 8.39 hours per week.

The welfare-gender regime in Sweden is, in many respects, similar to the welfare-gender regime in France. There are, however, important differences. Like the French, the Swedish welfare-gender regime is characterised temporally by powerful natalist tendencies and the provision of significant levels of support for families. Whereas the actions of the Swedish welfare-gender regime impact positively on the temporal autonomy of fathers and mothers, they impact negatively on the temporal autonomy of men and women in households with no child. The sole exception to this pattern relates to non-earners in one-earner couples. The Swedish welfare-gender regime, like the French, has little effect on the discretionary time experienced by non-

earners in one-earner couples with no child. Unlike its French counterpart, however, the Swedish welfare-gender regime also has little effect on the discretionary time of non-earners in one-earner couple with at least one child. Another important difference between the Swedish and the French welfare-gender regimes relates to their differential temporal impacts on fathers and mothers and men and women in households with no child for those in two-earner couples. More specifically, the differences — in terms of the temporal impact the welfare-gender regime — between fathers and mothers in two-earner couples and men and women in two-earner couples with no child are less subdued in Sweden than in France.

VII. Impacts on Groups of Regime-specific Concern

As discussed in Section II above, different welfare and gender regimes take particular interest in the welfare of different subgroups in society. One of the most effective ways to assess welfare-gender regimes' differential impact on those of most concern to them, we ought conduct a subgroup-by-subgroup assessment of their impact on temporal autonomy.

Liberal welfare-gender regimes, recall, concentrate their largesse first and foremost upon the 'deserving poor' (old, young and disabled) and, secondly, on the poor. Other welfare-gender regimes with more pro-natalist orientations might consider motherhood, even single motherhood, a deserving status in its own right; earlier liberal welfare regimes agreed, as

seen in US Aid to Families with Dependent Children and the Australian Sole Parent Pension, still extant in the period here under discussion (Barrett 2001). But even after they ceased considering single mothers among the ‘deserving poor’ anymore, liberal welfare-gender regimes would still concentrate benefits upon single mothers and their children as the ‘poorest of the poor’. For that reason if no other, we ought to expect that, while some (but not other) welfare-gender regimes ought be expected to assist single mothers, liberal regimes ought be most particularly helpful to them.

Table 3 offers evidence on that point. There we see that the liberal welfare-gender regime of Australia does indeed make the greatest positive impact on the discretionary time of single mothers. It gives them more than 6 extra hours a week, compared to under 5 for the next highest other country. That performance ought be set in context, of course: Australian single mothers had less discretionary time, pre-government, than single mothers in any other welfare-gender regime; and even after the Australian welfare-gender regime’s stronger performance in assisting them, Australian single mothers end up with very substantially less discretionary time than in any other welfare-gender regime. (Indeed, the difference between regimes post-government — greater than 5 hours a week — exceeds the difference between the discretionary time of Australian single mothers pre-government versus post-government.) Still, if we are judging welfare-gender regimes by the priorities they set, the liberal Australian regime runs true to form: among all

welfare-gender regimes, makes the most difference to the (there paltry amount of) discretionary time that single mothers have.

[Table 3 about here]

Table 3: Discretionary time among single mothers (hours per week)

	Discretionary time		
	Pre-gov't	Post-gov't	Difference
Australia, 1989			
Mean, single mothers in paid labour	35.99	42.09	6.09
France, 1994			
Mean, single mothers in paid labour	43.70	48.56	4.86
Germany, 1994			
Mean, single mothers in paid labour	55.83	47.44	-8.39
Sweden, 1992			
Mean, single mothers in paid labour	50.01	54.27	4.26

Sample: Single mothers in paid labour, aged between 25 and 54 years.

Source: Authors' calculations from the LIS and the MTUS.

Corporatist welfare-gender regimes are most concerned to promote the interests of stay-at-home mothers. Table 4 shows that the two corporatist countries in our sample — France and Germany — are indeed the only ones to make any difference at all to the amount of discretionary time enjoyed by stay-at-home mothers. Furthermore, the magnitude of those welfare-gender regimes' contributions to the discretionary time of stay-at-home mothers is roughly on a par with that of liberal regimes to single mothers (and, to anticipate, that of social democratic regimes to partners in two-earner couples with children). Once again, stay-at-home mothers have as much or more discretionary time, in absolute terms, in Sweden than in the two corporatist regimes under discussion. But in terms of the difference welfare-state tax-transfer-child-care arrangements are concerned, the corporatist welfare-gender regimes make more difference pre-government to post-government.

[Table 4 about here]

Table 4: Discretionary time among stay-at-home mothers (hours per week)

	Discretionary time		
	Pre-gov't	Post-gov't	Difference
Australia, 1989			
Mean, mother not in paid labour with partner who is	42.70	42.70	0
France, 1994			
Mean, mother not in paid labour with partner who is	49.09	54.42	5.34
Germany, 1994			
Mean, mother not in paid labour with partner who is	49.31	52.31	2.82
Sweden, 1992			
Mean, mother not in paid labour with partner who is	54.40	54.40	0

Sample: Women with at least one child who are not themselves in paid labour but whose partner is in paid labour, both aged between 25 and 54 years.

Source: Authors' calculations from the LIS and the MTUS.

Finally, social democratic welfare-gender regimes' gendered egalitarianism leads them to focus most particularly upon the equal participation by men and women in the paid labour market, whether or not they have children. This leads to expect them to be supportive of dual-earner couples with children in general, and of women in such households in particular.

Table 5 offers evidence on that score. There we see that social democratic Swedish welfare-gender regime is indeed the only one in our sample that makes a positive impact on the discretionary time available to parents in dual-earner households. There we also see that both men and women in such households have, on average, very substantially more discretionary time in Sweden both pre-government and post-government than in any other country or welfare-gender regime.

[Table 5 about here]

Table 5: Discretionary time in two-earner households with children (hours per week)

	Discretionary time		
	Pre-gov't	Post-gov't	Difference
Australia, 1989			
Mean, fathers	71.99	71.10	-0.89
Mean, mothers	57.00	56.52	-0.48
France, 1994			
Mean, fathers	73.91	72.81	-1.10
Mean, mothers	61.71	60.96	-0.76
Germany, 1994			
Mean, fathers	80.24	76.49	-3.74
Mean, mothers	70.25	67.93	-2.32
Sweden, 1992			
Mean, fathers	79.86	82.68	2.82
Mean, mothers	70.56	72.98	2.42

Sample: Couples with at least one child and with both adults in paid labour and both aged between 25 and 54 years.

Source: Authors' calculations from the LIS and the MTUS.

VIII. Conclusion

Thus, the familiar welfare-gender regimes can indeed be replicated looking at things in terms of time rather than money. The great advantage of doing so is to help us see, in ways that are meaningful to one and all, just how big the differences between those regimes actually are.

Moving from Australia to Sweden, you would gain almost 13 extra hours of discretionary time — time to spend as you please. Think of it as having three mornings off work each week. That constitutes a huge difference in temporal autonomy.

Most of that difference comes from different regimes divergent styles of macro-economic management and their impact on wage rates. In the tables we have presented, that appears on the ‘pre-government’ — that is, pre-welfare-state — side of the ledger. In a larger sense, of course, macro-economic management is an aspect of government policy as well, and one that varies importantly across welfare-gender regimes.

The specifically tax-transfer and childcare arrangements of different welfare-gender regimes make much less of a difference than that. On average, those arrangements give people nearly an hour extra a week of discretionary time in social democratic Sweden, whereas they actually reduce discretionary time on average in all the other regime types (by as much as 3 hours a week in Germany).

But countrywide averages tell only part of the story here. Each welfare-gender regime prioritizes certain groups over others; and those who are singled out for special treatment in this way tend to get over 4 hours a week more discretionary time from that regime's tax-transfer and childcare system. Stay-at-home mothers are favoured in this way in archly corporatist Germany (and to a lesser extent in France, whose corporatism is rather less arch in this and other respects). Dual-earning parents, adding together the increases in discretionary time to both partners, are favoured to about the same extent in social-democratic Sweden. Lone mothers are favoured to about the same extent in all countries (except in archly corporatist Germany); but lone mothers benefit half-again more than that, yet again, from liberal Australia's highly targeted welfare-gender regime.

All the welfare-gender regimes thus run true to form, favouring in time-terms precisely the groups that we have always thought they favoured in their tax-transfer and childcare provisions. Together, the impact of those arrangements is to increase the discretionary time available to the groups favoured by each regime by over 4 hours a week. Think of it as not having to go into work Tuesday morning. That is only a third the difference that different regimes make through their management of the macro-economy, to be sure. Still, having a half day more a week is a not-inconsiderable contribution to one's temporal autonomy.

Thinking of the impact of government interventions in these sorts of temporal terms helps us see, in a particularly vivid way, just what they are worth to us in our daily lives.

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Appendix Table A1: Discretionary time among men and women aged between 25 and 54 years in households with at least one earner (hours per week)

	Households with no child							
	Single earners		Two-earner couples		One-earner couples			
					Earners		Non-earners	
	Men	Women	Men	Women	Men	Women	Men	Women
Australia, 1989								
<i>Free time</i>	38.27	37.49	34.79	32.47	41.57	43.89	51.23	44.56
<i>Discretionary time</i>								
Pre-gov't	69.79	67.41	85.33	76.69	74.99	69.58 ^a	80.61 ^a	71.28
Post-gov't	69.30	66.89	85.02	76.43	74.44	69.12 ^a	80.61 ^a	71.28
Difference	-0.49	-0.52	-0.31	-0.25	-0.56	-0.46 ^a	0.00 ^a	0.00
France, 1994								
<i>Free time</i>	39.53	34.31	34.55	28.60	35.58	39.22	58.46	39.71
<i>Discretionary time</i>								
Pre-gov't	71.33	69.10	85.01	79.39	75.78	62.82	81.70	71.06
Post-gov't	67.51	65.23	82.91	77.58	71.97	58.59	81.70	71.06
Difference	-3.82	-3.87	-2.10	-1.81	-3.81	-4.23	0.00	0.00
Germany, 1994								
<i>Free time</i>	46.29	38.55	37.61	35.57	44.73	32.45	51.50	45.21
<i>Discretionary time</i>								
Pre-gov't	77.87	76.04	90.19	84.89	84.28	72.06 ^a	84.90 ^a	74.94
Post-gov't	72.23	69.39	87.40	82.61	79.47	66.60 ^a	84.90 ^a	74.94
Difference	-5.64	-6.65	-2.79	-2.28	-4.81	-5.46 ^a	0.00 ^a	0.00
Sweden, 1992								
<i>Free time</i>	40.75	39.35	35.44	32.57	36.32	39.90	57.54	43.80

Discretionary time

Pre-gov't	73.33	74.49	92.72	88.33	68.66	65.99 ^a	91.87 ^a	80.76
Post-gov't	71.05	72.42	91.87	87.72	66.03	63.88 ^a	91.87 ^a	80.76
Difference	-2.28	-2.07	-0.85	-0.62	-2.63	-2.11 ^a	0.00 ^a	0.00

	Households with at least one child								Total N
	Single earners		Two-earner couples		One-earner couples				
					Earners		Non-earners		
Men	Women	Men	Women	Men	Women	Men	Women		
Australia, 1989									
Free time	33.76	31.27	32.18	28.65	31.53	35.58	48.25	31.50	4,238
Discretionary time									
Pre-gov't	46.66	35.99	71.99	57.00	59.13	38.76 ^a	67.82 ^a	42.70	6,321
Post-gov't	51.29	42.09	71.10	56.52	57.30	36.42 ^a	67.82 ^a	42.70	6,345
Difference	4.63	6.09	-0.89	-0.48	-1.83	-2.34 ^a	0.00 ^a	0.00	
France, 1994									
Free time	26.99	29.60	33.16	26.71	35.69	32.55	48.56	32.22	4,575
Discretionary time									
Pre-gov't	56.99 ^a	43.70	73.91	61.71	57.74	37.38	71.54	49.09	3,216
Post-gov't	58.79 ^a	48.56	72.81	60.96	61.38	42.65	74.35	54.42	3,204
Difference	1.80 ^a	4.86	-1.10	-0.76	3.64	5.27	2.81	5.34	
Germany, 1994									
Free time	39.78	34.50	37.28	33.58	38.30	28.34	48.37	34.62	7,273
Discretionary time									
Pre-gov't	68.93 ^a	55.83	80.24	70.25	65.47	29.39 ^a	69.19 ^a	49.31	2,736
Post-gov't	62.32 ^a	47.44	76.49	67.93	62.40	26.74 ^a	72.25 ^a	52.13	2,724
Difference	-6.61 ^a	-8.39	-3.74	-2.32	-3.07	-2.65 ^a	3.07 ^a	2.82	
Sweden, 1992									
Free time	28.92	30.66	32.28	30.26	32.69	25.13	53.26	31.10	4,694
Discretionary time									
Pre-gov't	58.14	50.01	79.86	70.56	60.49	51.67 ^a	79.36 ^a	54.40	6,630
Post-gov't	61.44	54.27	82.68	72.98	66.42	58.36 ^a	79.36 ^a	54.40	6,584
Difference	3.30	4.26	2.82	2.42	5.93	6.69 ^a	0.00 ^a	0.00	

Note: ^a The number of observations in this cell is less than 30.

Source: Authors' calculations from the LIS and the MTUS.