discussion paper

TAXING CARE:
ENHANCING THE VALUE OF
CHILDCARE TIME
IN THE DUAL EARNER ERA

JORIS GHYSELS
GERLINDE VERBIST
JOSEFINE VANHILLE

Januari 2011

TAXING CARE:
ENHANCING THE VALUE OF CHILDCARE TIME
IN THE DUAL EARNER ERA

JORIS GHYSELS (*)
GERLINDE VERBIST (*)
JOSEFINE VANHILLE (*)

Januari 2011

Abstract: This article introduces the idea of a childcare time benefit that reconciles three ambitions: to reach a high level of labour market participation, to revalue parental childcare time and to enhance the freedom to choose in the reconciliation of work and family life. The proposed benefit is based on the pattern of effective childcare time in society, that declines with the ageing of the children. This decline defines a clear path over time with increasing monetary incentives to (re)turn to the labour market. Furthermore, the benefit is unconditional and, thus, does not direct parents in their choice between parental care and care services.

Simulation of first round effects of the benefit on Belgian households suggests a disincentive for life-long retreat from the labour market, while offering monetary gains for homemakers with young children. Moreover, single parents see their poverty risk decline by more than a quarter.

*   Centrum voor Sociaal Beleid Herman Deleeck, Universiteit Antwerpen

1. INTRODUCTION

In this paper we develop the idea of a tax-based compensation of childcare time that enhances the freedom of parents with respect to the reconciliation of work and family life. Over the past decades, social protection systems in Western welfares states have designed new ways to facilitate the reconciliation of work and family life, offering child care services and career interruption schemes to parents. The rationale behind these new policy measures is double. First, it lies in actual social developments, like the rise of dual earner families with new demands for social support. Second, it stems from widespread convictions about the social value of employment. Activation in the sense of a maximisation of the employment rate has become the cornerstone of contemporary social policy. It is believed to bolster individual well-being, while also fostering macro goals like the budgetary balance in our ageing societies (Lewis and Giullari 2005). Yet, the incentive and disincentive effects are not a priori clear. They depend on the effective participation in childcare services and career interruption schemes, which in turn relies heavily on the degree of public funding, but equally on the social contextualisation (e.g. dominant parenthood values and workplace practices).

The reconciliation measures add to existing family policies. Child benefits and child related tax deductions were created decades ago to compensate families for the expenses related to child rearing. Theoretically, these (often) universal benefits were grounded in the idea of positive externalities. Children represent a benefit to society that transcends the individual valuation of parents and, hence, societies should encourage adults to invest in child rearing in order to survive. Interestingly, in practice this general idea has been translated in different systems. Some are clearly pro-natal with benefits increasing with the rank of children (e.g. France, Belgium), while others are more tightly linked to actual monetary costs and, hence, incorporate returns to scale and age supplements (e.g. the United Kingdom).

However, we know of no country where the childcare responsibilities of parents are reflected fully and in a choice neutral way. On the one hand, most child related measures reflect only the monetary side of child rearing. The existing time compensating measures, on the other hand, are tightly linked to a previous attachment in the labour market and compensate a parent's income loss during his or her absence. Alternatives to the latter are compensations for parents staying at home (e.g. Norway[1], Finland and France). These are related to the parental provision of care and hence, are again tied to a particular parental choice.

In this paper, we argue for a compensating mechanism that is more radically grounded in the care needs of children and is truly universal. We develop the idea of a benefit that stems from (socially accepted) childcare time. This benefit reflects the effective care time spent on children. Since this (out of school) care time declines sharply with the age of the child, the benefit should follow suit. As such it follows contemporary care practices, but avoids becoming a disincentive for labour participation.

---

[1]   In the Norwegian case the decision criterion is whether parents use subsidised care or not. Consequently, also informal care provision or even formal non-subsidised care is eligible.

The remainder of our paper is organised as follows. First, we discuss the theoretical basis of our proposal, making reference to the social justice ideas of Sen (1985, 1999) and Nussbaum (2005), as they were applied to childcare time by Bojer (2005, 2006) and gender balancing by Lewis and Guillari (2005). Secondly, we test the applicability of our idea, developing on the implementation of our care benefit system on Belgian households and simulating its distributional outcomes. We conclude with a discussion.

2.   A TAX BASED COMPENSATION OF CHILDCARE TIME: REFERENCES TO THEORY

In this theoretical discussion of our time related benefit we want to reflect on two central principles on which our proposal is based: 'real' freedom of choice and a social reference of time use.

Genuine or real freedom to choose is an idea that continues to inspire intellectual discussion. There is wide agreement that individual freedom is crucial to human development and well-being. This is especially true in Western welfare states, where individual autonomy has become a centrepiece of society. Historically, the idea is grounded in a long philosophical tradition (for an overview, see e.g. Robeyns, 2005; Sen, 1999). Sen's capabilities approach can be seen as a recent exponent of this tradition. Sen links it to distributive justice and aims at the "expansion of the capabilities of persons to lead the lives they value – and have reason to value. These capabilities can be enhanced by public policy, but also, on the other side, the direction of public policy can be influenced by the effective use of participatory capabilities by the public. (…) The success of a society is to be evaluated, in this view, primarily by the substantive freedoms that the members of that society enjoy." (Sen 1999; p.18).

Central to this thesis is the notion of a person's 'agency freedom'. It "refers to what the person is free to do and achieve in pursuit of whatever goals or values he or she regards as important. A person's agency aspect cannot be understood without taking note of his or her aims, objectives, allegiances, obligations, and – in the broad sense – the person's conception of the good. (…) The ability to do more good need not be to the person's advantage" (Sen 1985; 204, 206).

Sociological and economic research, however, signals important limits to the individual choice set. Humans are essentially relational and their choice set is determined by norms and values of the communities they belong to and/or they have been socialised in. Moreover, the choice set of individuals is bound by material limitations (among others determined by the choices of other individuals), which limit the realisation of unbound human aspirations. Most of the ongoing debate therefore focuses on the degree of freedom Western citizens have. Optimists minimise the impact of social pressure, while pessimists tend to treat individuals as weak elements in an all-determining macro-structure.

The recognition of the ideal of freedom to choose and its many restrictions, brought about a scientific current that scrutinises current policy measures for their degree of implicit coercion and suggests improvements to lift the impediments to choice neutrality. Our proposal fits in this endeavour and tackles a quite general defect of income tax policy that was already highlighted in 2001 by Apps and Rees. The authors argued that contemporary thinking about the cost of children and more in particular its compensation in tax or social security systems has been largely

geared towards the market consumption costs related to children. However, the value of time represents an equal and often even more important parental effort[2]. Moreover, childcare time is not equally distributed over the population (e.g. men versus women, or dual versus single earner couples)[3]. The omission of childcare time-related measures in the income tax system leads to an uneven treatment of parents.

Moreover, Lewis and Guillari (2005) note that this defect of the tax and benefit system particularly hurts women and hence contributes to the lack of gender balance in modern policy making. The authors sustain that care is essential to human identity, especially but not exclusively, to women. Therefore, individuals can rightfully expect their capabilities set to enable them to choose to care or not. Accordingly, Lewis and Guillari call upon politicians to safeguard freedom to choose in this respect, although they immediately recognise that the freedom to choose to care has to be balanced against other social goals like affordable old age pensions. Even so, the authors stress that 'real' freedom to choose in the field of care will not be realised without a revaluation of individual care efforts. They detail how strongly contemporary policy making in the fields of family and gender equality is oriented towards universal access to paid employment (and, consequently, individual income), thereby effectively devaluating other fields of human activity, like care work.

Taking the above arguments to heart, we design a new benefit, targeting to fill the lacuna in the income tax system and compensate for care time efforts. To foster freedom to choose, we explicitly avoid dependency of the benefit on actual choices or behaviour (in this case the exact mix of parental and non-parental care time devoted to every individual child). Instead, we follow Bojer (2006), who puts forward socially acceptable behaviour rather than individually specific behaviour as the benefit reference.

Bojer (2006) applies Sen's capability approach to argue that to achieve social inclusion, parents are to make specific efforts to care for their children. Society depends on parents for the upbringing of its future citizens and develops a set of socially sanctioned expectations ('norms and values') to guarantee the proper inclusion of its new members. Therefore, by having children, parents are socially constrained in their time allocation and can no longer realize their full income in terms of Becker (1991). In other words, parents face an additional constraint imposed by social expectations regarding the upbringing of children. Parents are free to choose the exact mix of own childcare time and childcare services, but both options curtail the potential private income, either by a time constraint or by expenses on these services. Note, however, that Bojer (2006) does not suggest to treat the actual care efforts of parents as the limiting value. Following Sen, she proposes to determine a socially accepted amount of childcare effort through a democratic procedure. This means that parents receive a kind of childcare time entitlement according to ruling social norms. In practice, most parents will provide either more or less care

---

[2]   See, for European examples: Gustafsson and Kjulin (1994) and Sousa Poza et al. (2001)

[3]   See Minnen and Glorieux (2004) for Flanders, or Bittman and Wajcman (2000) for multinational findings.

for their children than this norm, but this is their personal decision and they will not be compensated for a possibly larger effort.[4]

We elaborate hereafter a system that incorporates socially accepted hours of childcare time in household income. The amount of the benefit relates to the number and age of children. The care time benefit is independent from the childcare being market- or self-provided, because it is the total time effort that counts. The optimal mix of both is left to the parent(s), who are likely to decide on the basis of their preferences and the opportunity costs of the alternatives[5].

Using a social norm has certain advantages. First, the variation in age and number of children provides a fairly simple base for administration. Second, it offers a straightforward legitimizing logic by treating all children equally, i.e. without variation that can be influenced by the choices made by the parents.[6] Instead it follows the behaviour of the majority of parents, which makes it a system with limited, but explicitly defined variation.

As a corollary of the latter, the proposed childcare benefit avoids introducing unilateral incentives. On the one hand, it offers a compensation for the care time that children require. On the other hand, it follows current social practice which relates childcare efforts closely to the age of the child. As has been repeatedly shown for a variety of Western countries, we demonstrate below for Belgium that parents tend to spend less time on care activities when their children grow up. This decline over time introduces a decreasing pattern in our care benefit, which implies a gradually increasing employment incentive to parents and, hence, ties the care benefit system to other social goals like maximal employment rates. As such it stimulates parents not to lose their links with the labour market completely, while at the same time valuing childcare time, a currently undervalued and strongly gendered human activity.

---

[4]   There is no monetary sanction for under-providing, but sociologists argue that society disposes of a whole set of sanctioning mechanisms to signal deviance from the norm.

[5]   The benefit itself does not take opportunity costs of the alternatives into account. In this context, one of the most often investigated examples is the opportunity cost of working versus not working for the second earner in a family with children - given the burden of formal childcare costs for second earners and the possible financial compensations for spouses staying at home. As hourly wages depend (among others) on the type of job, the opportunity costs of a (partial) withdrawal from the labour market equally vary between persons. However, compensating for this feature of the wage distribution goes beyond the scope of the designed benefit, which aims in the first place at a universal valuation for child care time efforts. At the same time, as will be found from the simulations, the actual amount of the proposed benefit remains lower than the minimum wage (assuming this as the lowest possible reservation wage), so that substantial labour market withdrawal because of financial reasons is relatively unlikely. Of course, before actually implementing this benefit into a country's tax benefit system, possible interactions with other benefits have to be investigated, and income traps in specific family situation identified. An extensive discussion of the expected labour market effects of the proposed benefit, can be found further in the paper.

[6]   Strictly speaking, the number of children can be influenced, but the effect of this parental decision is far from immediate.

3. A TAX BASED COMPENSATION OF CHILDCARE TIME: A MICRO-SIMULATION EXERCISE FOR BELGIUM

We now develop the idea in depth with a practical example for Belgium. We start with a short discussion of the current care context in Belgium, which highlights the current incentive structure for parents. Thereafter, we show how care time is distributed over the population of parents and how we use it as the basis for the proposed care time benefit. The proposed benefit is then simulated by replacing the existing care time-related measures that were identified as impediments to freedom of choice, in order to achieve government revenue neutrality. Finally, the potential outcomes related to the introduction of the benefit are illustrated and discussed.

3.1 The current care context: policy measures and behaviour

The Belgian situation offers a perfect example of the hybrid systems we denounced in the introduction to this paper. In 1988 the Belgian government introduced individual taxation in the income tax system to adapt to the new social reality of dual earnership. Together with the individual taxation rules, a 'marital quotient' system was introduced in order to avoid that (male) breadwinner families would suffer from the new taxation mechanism. The 'marital quotient' means that for single-income couples, a proportion of the professional income of the earning spouse can be transferred to the non-earning spouse, after which both spouses are taxed individually. The transfer is limited to 30% of total professional income of both spouses and to a maximum amount of €8,030 (tax year 2004). As a consequence of the progressivity of the Belgian tax rates, this amount is taxed against the lowest marginal tax rate instead of against the higher rate of the bracket in which the single earner's personal income would end up when treated as one entity. The system applies also to double income couples if one spouse earns less than €8,030 and his/her earnings do not exceed 30% of the total professional income of the household.

In present Belgian society the legitimacy of the 'marital quotient' system becomes, however, increasing debatable. Originally, the system was seen as a means to foster neutrality of choice (between single and dual earnership among couples). Yet, with the growing employment rate of Belgian mothers, the system has to a large extent transformed into a subsidy to older cohorts for their past childcare efforts rather than a compensation for childcare efforts of the current generation of parents (Verbist, 2002). Furthermore, the compensation for staying at home is completely tied to the income of the working spouse. In this respect, it does not provide any insurance against the adverse consequences of a possible divorce.

Moreover, many new policy measures to combine work and care have emerged since 1988. Most importantly, direct subsidies to childcare services have expanded considerably and a tax deduction for childcare expenses was introduced alongside a flat rate tax deduction for those not using formal childcare services. Furthermore, parental leave legislation was passed, which incorporates a flat fee benefit to a parent taking leave for a period of three months. Additionally, a system of career breaks allows parents to extend their leave of absence with –depending on

sectoral agreements - one to five years.[7] Both parental leave and career breaks can be taken up full- or part-time.

Finally, all Belgian households with children enjoy three major public contributions: child benefits, a (virtually) free school system for children from the age of two and a half and a tax allowance for dependent children.[8] Child benefits increase with the age of the child and are rank dependent in a way that favours larger families. The Belgian educational system extends to small children, with –internationally speaking - high enrolment rates among the youngest children. At the age of three almost all children attend pre-primary school. Even though full time attendance is only generalised by the age of five, the former means that the parents' concern for full time care is limited to a fairly narrow age range: between the age of 2 months (the end of compulsory maternal leave)[9] and the age of 30 months (the earliest entry age of pre-primary school).[10]

In sum, the Belgian state offers parents a mix of measures to help them cope with both the monetary and the time requirements linked to the upbringing of children. Clearly, some are general offers to parents (e.g. child benefit), while others are up to parental choice (e.g. parental leave). Yet, the 'marital quotient' is the only measure that provides a life-long compensation to a non-earning spouse. As such it seems a remnant from the past when male breadwinner families were the norm. Not surprisingly, a large part of its use in now concentrated among the older generations. Among younger generations, the 'marital quotient' provides an employment adverse policy signal that is at odds not only with the quasi-generalised dual earnership, but also with the activation doctrine of current politics.

 When evaluated in terms of fostering real freedom to choose, a number of features of the current care policies still hinder an equal care capability set for all parents . The time compensating mechanisms that are tightly linked to employment (parental leave and career interruption schemes) provide fairly high wage replacement rates, but wage compensation declines with rising wages as it is a flat rate benefit. In many households, this provides men with an argument not to engage intensely in temporary leave, because they are often the main income providers of

---

[7]   Note that the career break scheme is not tightly linked to care responsibilities. Many mothers use it to extend their leave while maintaining a link to their former job, but among men it is mostly used to shorten their career before retirement (e.g. by taking part-time leave in the years before full-time retirement).

[8]   The tax allowance for dependent children is added to the individual tax credit of the partner with the highest professional earnings, thus treating dual and single earnings parents alike.

[9]   Maternity leave consists of 9 weeks of post-natal leave and 6 weeks of pre-natal leave. However, 5 weeks of the latter can be transferred to the post-natal period, thus extending it to 14 weeks. Most mothers intend to use this transfer, but realisation of this intention obviously depends on the evolution of the pregnancy.

[10]   School entry is limited to seven specific moments in the year (after holiday periods, one to two months apart from each other), which means that the effective earliest entry age may be slightly higher than 30 months.

their household and hence the income loss of leave is higher for men than for women[11].
Moreover, workplace practices are reported to deter men from taking leave to a larger extent than
women. On the contrary, the 'marital quotient' system offers a time compensation mechanism
that does not require a link with the labour market. Furthermore, it is only available to individuals
living together with a partner and, hence, discriminates against single parents. Finally, it is not
actually linked to current care efforts, but rather compensates for a care role. To older
generations, this represents the social contract they grew up with (the male breadwinner model),
but to generations that are currently at active age, it represents a tax benefit that is no longer in
line with their way of dealing with care responsibilities. All in all, even without taking social
values and norms into account, there is little doubt that the care capabilities set in Belgium differs
between men and women and between single parents and couples.

3.2   Care time: the individual versus the social

To determine a choice-neutral compensation of childcare, we elaborate a measure of socially
required childcare time that relates to the working time that parents sacrifice for caring for their
children. Consequently, our measure requires the observation of two elements: the potential
working time that parents have at their disposal and the time needed to provide childcare, either
by themselves or through childcare services.

To fix the amount of hours that reflects the potential working time of parents, various
assumptions are possible. Following the full income idea of Becker (1991), one might choose all
non-sleeping time in a week as reference and use, for example, 112 hours as the reference time,
assuming 8 hours of sleep per day and 7 days a week as potential working days.

However, for policy purposes it is not appropriate to use amounts of time that diverge strongly
from generally accepted working times in the society at hand. Therefore, we use the distribution
of actual hours worked as a reference for our estimate. We obtain these working schedules from
the Flemish Family and Care Survey (FFCS) database, which contains the results of a weekly
work schedule for a representative set of parents in Flanders.

As the actual estimate of the potential working time of parents, we choose the time spent on paid
employment by fathers in a dual-earner household. We exclude women and single-earner
families because they are problematic representatives of unconstrained labour market behaviour.
A large part of mothers restricts paid employment because of care responsibilities, which makes
the distribution of their actual working times unsuitable for our purpose. Likewise, men in single
breadwinner families are likely to reflect in their choices the particular situation of their
household (a non-working spouse or single parenthood), which may again render the distribution
of their working hours less suitable as an estimate of potential working time.

Table A.1 in Annex describes the distribution of the time fathers declared to have spent on paid
employment during a randomly chosen observation week, outside of traditional holiday periods.

---

[11]   We want to stress that in this respect, policy targeted at reducing the gender wage gap is likely to
        affect the gender balance in care time as well.

It is not clear-cut how to derive a social norm regarding 'potential working time' from this table. On the one hand, we want to take into account 'potential' working time, including parents' preferences as broadly as possible. On the other hand, we explicitly consider what society wants to compensate for, limiting the care time compensated for to a socially accepted norm. We use as basic estimate of the social norm the 90% value (60.0 hours) being an estimate of the potential working time, coming close to the idea of full income, be it reduced to socially sanctioned limits, i.e. 10% of working men are actually spending this amount of time (or more) on their jobs.[12]

In practice, parents will determine how much of their potential working time they can actually spend on childcare time, taking into account their preferences and their material and immaterial constraints. The care requirements of their children play undoubtedly an important role in the latter. However, society assumes part of these care requirements in a universal way through the schooling system. Therefore, parents do not need to organise care for their children for the full period of their potential working time, but only for the part of working time that is not covered by the schooling system.

In Table A.2 in Annex we show descriptive information about the time parents declared their children to be at school during a randomly assigned week in the school year 2004-2005. The table nicely reflects the high enrolment rates of toddlers in Belgian pre-primary schools, which form part of the schooling system and are fully subsidized by the state. By the age of three, enrolment is almost 100%, but full time attendance follows only later. The latter becomes nearly universal around the age of 5, i.e. one year before the start of primary school (the start of compulsory education).

Obviously, the survey results in the table reflect all types of school attendance in the observation week, including the absence due to illness. Consequently, zero values occur at all ages, which explains why the mean values lie systematically below the median values. Moreover, the time registration did not distinguish between schooling time related to class attendance and care provided by schools before and after class times. While the first is universal and free of charge for parents, the second is only used by a fraction of parents (and children) and is charged to parents as a type of formal childcare service.

To avoid measurement errors, we therefore propose to use the smoothed numbers shown in the last column of Table A.2 as estimate of the universal care offered by the Belgian schooling system. This figure reconciles the characteristics of the Belgian schooling system presented above with the observational results of the survey.

---

[12]   As an alternative and for sensitivity testing we also used the median (42.5 hours), which corresponds to full time paid work among Flemish parents. Given our choice for a fixed budget, the results were in general not very different. We selected the median rather than the mean because the latter is likely to be biased upwards by a limited number of outliers (like the maximum value shown in the table, 167 hours a week, i.e. day and night for 7 days, except for 1 hour). Results can be obtained from the authors.

Finally, we subtract the time this child spends at school from the potential working times of parents[13] and we sum the resulting time for all children younger than 13 at the household level. Thus, we obtain the number of child care hours shown in the following table.

TABLE 1: SOCIALLY ACCEPTED NUMBER OF CHILD CARE HOURS (CCH) PER HOUSEHOLD IN AN AVERAGE MONTH, ACCORDING TO THE AGE OF THE YOUNGEST CHILD AND THE NUMBER OF CHILDREN IN THE HOUSEHOLD.

age youngest child		Number of children < 13				
		1	2	3	4+	Total
Younger than 3	Proportion with children under 13	14%	14%	5%	2%	36%
	Estimate of socially accepted child care hours	255	449	592	866	413
3 and over	Proportion with children under 13	37%	22%	4%	1%	64%
	Estimate of socially accepted child care hours	162	326	464	683	248
Total	Proportion with children under 13	51%	36%	10%	3%	100%
	Estimate of socially accepted child care hours	188	374	535	797	306

Source: EU-SILC, 2004.

Summarizing, we determined the socially accepted childcare time as the total number of hours of childcare services that parents need to provide within a realistic period of choice between employment and self-provided care. For pre-school children this amount equals a typical full-time working week. Yet, we get a much smaller number of hours for children attending school, since we subtract the normal school hours from the working week, because in this time interval care for the children is transferred to a state organised and paid authority, i.e. schools. Furthermore, we added the amounts of time obtained over all children in the household, as if parents would completely outsource the socially accepted childcare time and there would be no economies of scale in parental time use. This assumption holds only if parents have chosen the corner solution of (dual) full-time work. However, our results in Table 1 show that in practice we do not obtain strictly linear increases with the number of children. This can easily be explained by the fact that larger families often have a mix of pre-school and school-going children, for whom the moderating age effect comes into play (see also Table A.2).

3.3 Allocating the benefit: alternatives and budgets

For the simulation of the financial consequences of the introduction of our care time benefit on the household income, we assume budget neutrality. To finance the care time benefit, we abolish the tax deduction for childcare fees, the extra tax exemption for families not using childcare

---

[13] Hereby making abstraction of the fact that in reality for some parents, work hours may well deviate from the standard school hours.

services, the direct subsidies to childcare providers, the 'marital quotient' and the transfer of personal tax credit.

The most obvious abolition regards the 'marital quotient'[14]. As discussed, this system is most frequently used by older retired couples, of whom the non-working spouse often did not build up any pension rights. A complete and indiscriminate abolition of the marital quotient would therefore mainly hurt old age pensioners[15] , who cannot easily adjust their behaviour to new policy rules. In fact, they have lived according to a particular social contract and it seems fair to honour the choices they made accordingly. Abolition of the marital quotient can be considered as a last step in the individualisation of the personal income tax system that has been gradually introduced with the two last major tax reforms (1988 and 2001). Therefore, we only simulate an abolition of the 'marital quotient' for individuals younger than the age of 50.

A second part of the simulation targets the existing compensations for the actual use of childcare services. If freedom of choice is to be fostered, all families with children should be treated equally, independent of their labour market behaviour or use of childcare services. Therefore, our simulation also abolishes tax deductions for childcare fees and the direct public subsidy to childcare institutions. The Belgian income tax system incorporates a tax reduction related to cash expenditures for childcare services. This means that taxable income of the fiscal unit is reduced with out-of-pocket costs of the childcare service, with a maximum of €11.20 per day per child younger than 3[16]. Families that do not deduct childcare fees qualify for a lump-sum raise of the income tax exemption with €480 for every child younger than 3. Apart from tax based policy measures, we also incorporate direct subsidies to childcare institutions in our reform proposal. The latter are clearly selective, since they only benefit households who effectively use subsidised childcare services.[17] Earlier analyses by Ghysels and Van Lancker (2009) for the region Flanders

---

[14] In addition to and along the lines of this, the transfer of the personal tax credit between partners is discarded as well. This rule allows that if one partner cannot benefit from the entire amount of his personal credit because his income is too low, the remaining sum is transferred to the other partner, where it is added to the outstanding personal tax credit. This rule, indissolubly interconnected with the marital quotient system, has a much more modest effect in a system where the marital quotient system is in place. In a system without the marital quotient, however, the transfer of personal tax credit between partners would partially take the place of the marital quotient system and in essence trigger the same effects.

[15] This was confirmed when this scenario was simulated. While the budget made available by a complete abolition more than doubled in comparison with a partial abolition only for persons younger than 50, poverty rates for all age groups older than 50 increased substantially.

[16] In 2006 this measure has been extended to all children younger than 13. Because the simulations however concern the tax year 2004, we chose to simulate the measure in its configuration of that time.

[17] Annual reports of the respective Dutch and French speaking community administrations responsible for childcare indicate that by the end of 2004, they jointly subsidised 65,557 places and supervised 31,760 non-subsidised places. This means that in total 67% of childcare places enjoy public subventions (the non-subsidised may enjoy small subsidies for specific items like training, but their operational expenses are to be met completely by parental fees).

show that childcare services use is tightly linked to the employment status of the mother. Because of the correlation between employment and income, the use of childcare services and, hence, the benefit of government subsidies to these services, are not evenly distributed over the population. Especially the lower 20% of families with children below three years of age benefit markedly less from public childcare service funding than other groups in society.

Abolition of the marital quotient and the transfer of personal tax credit between married partners (younger than 50) would raise a budget of €887.1 million, whereas the revenue coming from the abolition of the childcare fee deduction and the extra exemption for young children is much more modest with approximately €42.3 million. The abolition of the direct subsidies to childcare services, though, would produce a budget of €208.8 million. Thus, the total amount to be allocated to the care time benefit adds up to €1.138 billion.

This budget is distributed over households with children according to their socially accepted amount of childcare time in the household, calculated as the difference between workweek hours and time that the child spends at school (see Table 1). When calculated per hour, this leads to a rate as little as €0.30 per hour per child. Table 2, however, shows that the yearly totals are not negligible when compared with the two current universal cash allowances for children. A family with two small children (1 and 3), for example, would get an additional care time benefit equal to 63% of the current child benefit. For families with older children, the age structure tilts the balance between the alternative measures. If two children are aged 6 and 8, for example, the yearly care time benefit[18] would amount to 41% of the current child benefit. This result follows from the opposite age structure of the measures. While our care time benefit declines with the age of the child, the Belgian child benefit increases with age and, hence, the gap between both increases with the age of the child. However, the two examples above reflect comparisons of gross amounts, not taking into account the abolition of the marital quotient. Net comparisons and evaluations are the subject of the following section.

---

[18]   In this scenario, we use as an example a household with the youngest child aged older than 3, and therefore we use the 326 child care hours per month of Table 1.

TABLE 2: A COMPARISON OF THE PROPOSED CARE TIME BENEFIT WITH EXISTING
COMPENSATIONS FOR CHILD RELATED EXPENDITURES (SELECTED FAMILY TYPES)

Yearly Totals (net amounts)	Family with children aged 1 and 3	Family with children aged 6 and 8
Proposed care time benefit	1605.00 €	1236.00 €
Current child benefit	2533.08 €	2996.64 €
Current child tax allowance	803.50 €	803.50 €

Source: EU-SILC, 2004.

3.4   Allocating the benefit: distributional outcomes

In Table 3 we show the (simulated) effect of the implementation of our policy proposal on individuals according to family type. We differentiate between various family compositions, because the various aspects of our policy proposal are likely to favour or hurt families differently. While overall poverty rates remain stable, the vast majority of individuals living in households with children gain income, while about 1/4 of the individuals living in households without children see their final income decrease after the introduction of the care time benefit .

TABLE 3: IMPACT ON INCOME FOR VARIOUS POPULATION GROUPS

		Poverty rates		Gaining or losing income?	
	Share	Baseline	Alternative	Gaining	Losing
Total population	100%	11.5%	11.7%	28%	25%
Individuals in house-holds without children	59%	12.8%	13.5%	0%	27%
Individuals in house-holds with children	41%	9.2%	8.5%	74%	23%
Lone parent families	5.8%	22%	15%	93%	5%
Dual earner families	21%	2%	2%	88%	10%
Single earner couples	13%	16%	17%	42%	52%

N = 12934

Poverty rates reflect the standard EU-methodology indicating that individuals live in households with an equivalent disposable household income of less than 60% of the median of the country involved.
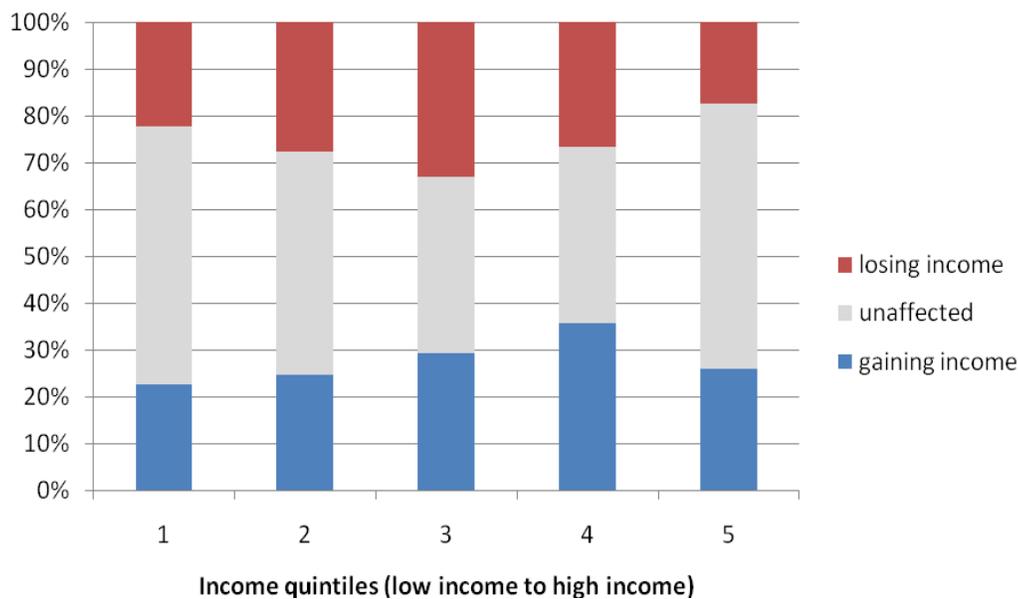
Source: EU-SILC, 2004.

When we take a closer look at the different family types with children, lone parent families would almost universally gain, closely followed by dual earner couples. Among single wage-earner families, the general effect is mixed. About 42% of the individuals living in single wage-earner families would gain from the introduction of the care time benefit, while about 52% are losers. This is not unexpected, because the bulk of the budget we use in this simulation stems from the abolition of the 'marital quotient', which favours single earner couples relative to dual earner couples. The marital quotient also offers no support to singles, since there is no partner to transfer income to or from. Apparently, for half of the single earner couples with children, the

current income gain from the 'marital quotient' is higher than the care time benefit they would receive in the reform scenario. Interesting, for the majority of dual earner couples (who are also the major users of childcare services) the care time benefit would be higher than the net income benefit they derive currently from the direct and indirect public subsidies to childcare institutions.

The reform involves considerable horizontal redistribution (from single earner couples to families with children in general), while evidence of vertical redistribution is not clear-cut. The poverty rate for single earner (couple) families does not rise significantly. Conversely, the positive impact for lone parent families is sizeable, with a drop in the poverty rate from 22 to 15%.

The following graph and table present more detail on the vertical redistributive effects. Graph 1 shows the income quintile distribution of winners and losers. A large part of the population is not affected by the reform proposal (grey bars), because these individuals live in families without children and do not use the 'marital quotient'. The distribution of winners (blue bars) is tilted somewhat more to the right than the distribution of individuals losing income (red bars), which suggests that overall more high income families are likely to gain from the reform than low income families.

GRAPH 1: THE DISTRIBUTION OF WINNERS AND LOSERS
BY INCOME QUINTILE (BELGIAN INDIVIDUALS, 2004)

Source: EU-SILC, 2004.

Table 4 allows a more detailed picture. The first columns reflect the average change of yearly disposable income of individuals. On average, individuals of the bottom quintiles lose a small amount while richer individuals gain somewhat. However, for both groups the amounts are very small, representing less than half a percent of pre-reform yearly income.

TABLE 4: DECOMPOSITION OF THE INCOME FLOWS UNDERLYING THE CARE TIME BENEFIT,

BY INCOME QUINTILE (BELGIAN INDIVIDUALS, 2004)

Income quintiles	Average change of yearly disposable income		Care time benefit	Change in yearly taxes	Income change due to rise in parental cost of childcare services
	€	%	€	€	€
1	-10.70	-0.08	190.09	-157.31	-42.77
2	-28.32	-0.24	232.00	-224.59	-35.63
3	-32.54	-0.24	218.89	-190.69	-60.63
4	66.47	0.36	235.13	-108.68	-59.90
5	54.04	0.21	162.07	-66.97	-39.48

All amounts expressed in €are standardised according to the 'modified' OECD scale.

Source: EU-SILC, 2004.

The remainder of Table 4 decomposes the small overall change in its underlying income flows. The care time benefit entails a rise in income, which is paid for by two income reductions: an increase in income taxes (by a cutback of tax reductions and the abolition of the marital quotient) and an increase of the parental costs for childcare services. Clearly, none of these three elements are uniformly distributed over the population. In the top and bottom income quintile, fewer families with children are present and, hence, on average this income group receives a smaller yearly amount than the middle groups. A similar demographic explanation applies to the financing channels, because both measures (the direct subsidies to childcare services and the tax reduction for the use of childcare services) are obviously linked to the presence of children in a person's household. Because of the more complex allocation rules of these measures, however, the pattern shown in the two last columns of Table 4 is not a simple reflection of the pattern of the care time benefit shown in the third column.

The bulk of the increase of income taxes follows directly from the abolition of the 'marital quotient'. This provides a much larger part of the budget used for the care time benefit, than the abolition of the tax reduction for childcare service use. As the families making use of the marital quotient system are single earner households, they are more concentrated in the lower half of the income distribution than in the highest quintiles. This explains the relatively high proportion of households losing income in the second and third quintile. Interestingly, the lowest quintile is less affected. This is explained by their overall low income level, which translates in low income taxes, which in turn means that even with the 'marital quotient' they were not gaining that much from tax reductions and, hence, do not lose much from its abolition. Moreover, singles, who cannot benefit from the 'marital quotient', are relatively more frequent in the lowest quintile.

Similarly, additional explanations apply for the distribution of the rise of the parental cost of childcare services (last column in Table 4). Because the subsidies to childcare centres are abolished, the price of formal childcare rises to its full cost. To assess the first-round impact of this change, we treat the increased cost of childcare as a decrease of the household disposable income, assuming no behavioural and/or market effects. On top of the demographic explanation given above, two countervailing forces are at work here. On the one hand, the use of subsidised

care services is more prominent in the upper quintiles – where the concentration of dual earner families is higher. Hence, the abolition of direct government subsidies to childcare services hits the upper quintiles more than the bottom. On the other hand, the current tariff structure of the subsidised childcare sector is progressive, meaning that lower income families benefit from a larger direct subsidy than higher income families. When the care time subsidy is introduced, low income families that make use of formal childcare facilities face a steeper rise in childcare costs than high income formal childcare consuming families. The combination of both mechanisms results in relatively high net private contributions from the bottom quintile and a relatively low contribution from the second quintile which somewhat moderates this group's high contribution through the rise in income taxes.

All in all, the previous tables illustrate that the introduction of the care time benefit and the budgetary compensation of its introduction is not likely to have strong adverse consequences for the income distribution, even though it replaces some policy measures that are income dependent by a universal measure. Obviously, this does not mean that there are no gainers and losers in this exercise. Previously, we already pointed out that single parent families are likely to be among the strongest winners. An important losing group are parents who currently use formal childcare services at low rates (i.e. low income families in the subsidised sector). They lose their preferential tariff and face a steep rise in formal childcare costs, which is possibly only partially compensated for by the proposed care time benefit. For higher income families who pay – even in the subsidized sector – fees that approximate the real cost of the place, the loss of abolishing the tax deduction for childcare costs may become more important. It evidently depends on the size of the budget whether the care time benefit will compensate for the loss of direct subsidies or not.

More generally, the apparently limited extent of the vertical redistribution does not obviate considerable horizontal redistribution. To illustrate the latter, Table 5 shows average income losses and gains of losers and winners respectively, thus clarifying the income changes presented in Graph 1. Especially among lower income groups changes are considerable, both in absolute and in relative terms. We conclude that horizontal redistribution is considerable, as the number of individuals gaining and losing income is more or less balanced over the quintiles, and also overall poverty remains stable. This apparent stability, however, does also entail that for each household with children that is lifted out of poverty, a single earner family (most likely without children) drops below.

TABLE 5: THE AVERAGE CHANGE IN INCOME THROUGH THE INTRODUCTION OF THE CARE TIME BENEFIT FOR SELECTED GROUPS (BY INCOME QUINTILE) (AVERAGE AMOUNTS AND PERCENTAGE CHANGE)

	Individuals gaining income		Individuals losing income	
	€	%	€	%
1	510.86	6	-558.97	-7
2	480.71	4	-504.44	-4
3	426.41	3	-422.77	-3
4	454.54	2	-319.67	-2
5	389.81	2	-292.31	-1

See Graph 1 for the relative size of the various groups

Income is defined as individual equivalent disposable income, i.e. the disposable household income attributed to every individual member of the household.

Source: EU-SILC, 2004.

3.5 Static simulations: no labour market effects?

A major caveat of the above comparisons is their static nature. They do not reflect the behavioural changes that the alteration of the care capabilities set is likely to cause. An estimate of the latter goes beyond the scope of this paper, but we want to indicate some of the probable directions.

The care time benefit is by design an element of non-labour income. Empirical labour supply estimates almost invariably give negative income elasticities,[19] which suggest that both fathers and mothers will reduce their labour market time following the introduction of the care time benefit. The extent to which this employment reduction will affect mothers and fathers and their income is an empirical matter. A recent estimate of the income effect for Flemish dual earner couples (Van Klaveren and Ghysels 2009) for example, shows the expected negative effect, but it is very small for both men and women. This suggests that for employed parents the labour supply effect of the, all in all, moderate benefit is likely to be small.

Obviously, the estimates mentioned are based on behaviour that stems from the current care capabilities set. It can be expected that the revaluation of care time implied by the care time benefit, alters the social valuation of parental childcare time and, hence, alters parental time preferences. If the individual valuation of care time rises without a change in market wages, then time allocation models predict a larger decrease of market work than implied by the rise in non-labour income only. Yet again, the weight of this additional effect is an empirical matter.

In this respect, evaluations of the Norwegian cash for childcare (CFC) scheme are relevant. As in our policy proposal, the CFC grants a benefit to parents based on their care responsibilities. It is, however, more restricted in time because the CFC is only given when the child is aged 1 or 2.

---

[19]   For an overview see (Blundell and MaCurdy 1999)

Moreover, it is not completely unconditional, because it is only given to parents who do not use subsidised childcare services. Nevertheless, the CFC parallels our proposal in its valuation of parental childcare time[20], although at a much higher amount than in our simulation (approximately €4400 a year compared to €920 in our proposal)(Rönsen 2009:509).

Various evaluation studies were carried out, some immediately after the introduction of the CFC in 1998, some after a few years. All point out that parents have effectively retreated from the labour market (Kornstad and Thoresen 2007; Rönsen 2009). Moreover, the effect seems to increase with time, which may be explained by various kinds of learning effects. It may, for example, take time before parents incorporate the revaluation of parental care time in their time allocation choices. Anyhow, until four year after the introduction of the CFC hardly any variation was noticeable in fathers' behaviour, mainly meaning that it remain mothers who retreat from the labour market. Consequently, the gradual gender shift Lewis and Guillari (2005) are hoping for after the introduction of measures that increase the value of care work, has not (yet?) materialised in Norway. For our policy proposal, these evaluation results imply that we should not expect a strong behavioural change in the short term and, additionally, that a shift in the gendered allocation of time will not automatically follow from the care-time benefit.

Employment in childcare institutions may also be affected by our proposal. Abolition of subsidies may alter the demand of parents for these services, as it changes the price of childcare services. On the one hand, institutions that are currently subsidised, will increase their prices to market conform levels, which may decrease the demand for childcare services (and hence employment in this sector). But on the other hand, the proposed benefit provides a net change in disposable income for some groups, which may increase or decrease their demand for these services. Hence, the direction and the size of the effect cannot be determined a priori, and is an empirical matter, which transcends the scope of this paper.

4.   DISCUSSION AND CONCLUSION

In this paper we developed the idea of a care time benefit, set up as a universal compensation for the time effort required for the upbringing of children. The proposal aims at three improvements over the current situation in Western welfare states. First, it should improve the gender balance. Referring to time rather than goods, the proposed measure complements the existing child (tax) benefits that function as compensations for the consumption costs related to children. It thereby recognises that the successful upbringing of children does not only require goods (money), but also time. Through the explicit monetary valuation of time efforts, the care time benefit enhances the social recognition of an activity that many parents, especially mothers, regard as a crucial part of their identity. Therefore, the effective implementation of a care time benefit can be expected to foster the balance between male and female interests in society.

Secondly, it fosters effective freedom to choose. Admittedly, the concept of effective freedom to choose is a very complex principle in policy design and in childcare policy in particular. Effective freedom to choose the preferred care mix for one's child does not depend on the

---

[20]   At least potentially, because parents may also use the CFC to pay for non-subsidised care.

financial compensations for the time investments of parents only. The availability of high-quality and affordable childcare places, the parent's own work-schedule (which might include irregular working times), care preferences of the partner (in case of two-parent households) and workplace practices with regard to the possibility to temporary reduce working hours are but a few examples of important elements that go beyond the scope of a tax-based financial compensation for care time. We focussed on tax-based financially compensating childcare time, and argue that the proposed benefit enhances the effective freedom to choose. The existing compensation schemes that refer to care time (e.g. parental leave) derive from a particular labour market state of parents (gainful employment) and, consequently, discriminate against part of the parents. The universal character of the proposal enhances the individual agency of parents. Therefore, it can be seen as a major improvement of the (childcare) capability set of parents.

Thirdly, the explicit link to the social norm regarding child care time provides a guiding principle for parental behaviour without imposing strong choice restrictions. This way the proposal avoids becoming a blind promotion of individual agency that may foster the rights of individuals who already belong to the strongest in society. Implicit remnants of patriarchy in parenting norms may, for example, foster a female retreat from the labour market following the introduction of an unconditional benefit like the one proposed. Yet, our proposal explicitly refers to full-time employment and the fact that parents tend to decrease their childcare time with the rising age of their children. Consequently, the benefit declines steeply over time and, hence, does not impose a life-long employment disincentive, like male breadwinner compensations that continue to exist in some welfare states.

Summarizing, we argue on theoretical grounds that the proposed childcare time benefit will improve the gender balance and enhance effective freedom to choose for individual parents, while not structurally undermining the employment orientation of any citizen.

The simulation exercise we engaged on in the second part of this paper highlights some of the practical consequences of the proposal. We simulated an introduction of the proposal in Belgium and replaced the current male breadwinner compensation and childcare services subsidies by our care time benefit. To avoid a breach of the social contract of past generations, we limited the abolition of the male breadwinner compensation to individuals younger than 50. Even so, the bulk of the budget stems from the abolition of this measure among younger persons and only a quarter of the budget derives from the current direct subsidies to childcare service providers and income tax benefits to parents who use childcare services. Consequently, we clearly altered the (childcare) capabilities set of Belgian parents, enhancing the employment incentive for single earner couples and equalising the treatment of parental, informal, non-subsidised formal and subsidised formal childcare.

The behavioural consequences of this change of the choice structure are not immediately clear and transcend the scope of this paper. However, the static simulation shows that single parent families are likely to gain from the measure. Currently, members from this family type face a considerably higher poverty risk than members of two parent families and the care time benefit will reduce that risk significantly, while not altering the poverty risk of other families. Even without a rise of their poverty risk, about half of the single earner couples face a considerable decline of their disposable income after the introduction of our proposed policy scheme. This

stresses the strong employment incentive that forms part of the proposal. Obviously, this calls for additional measures that facilitate the (re)integration in the labour market of currently inactive persons.

All in all, our theoretical elaboration and empirical simulation suggest that it may be possible to do away with the dominant employment orientation of the current reconciliation policies and, concurrently, maintain sufficient employment incentives to guarantee long-term objectives of nowadays Western welfare states. Evidently, more empirical analyses and discussion will be required before the idea is ripe for actual implementation.

References

Apps, Patricia, and Ray Rees (2001) Household production, full consumption and the costs of children. Labour Economics 8(6):621-648.

Becker, Gary S. (1991) A treatise on the family, enlarged edition. Harvard University Press, Cambridge MA/London.

Bittman, M, and J. Wajcman (2000) The rush hour: the character of leisure time and gender equity. Social Forces 79(1):165-189.

Blundell, Richard, and MaCurdy (1999) Labor supply: a review of alternative approaches. in Orley Ashenfelter and David Card (eds) Handbook of Labor Economics (Volume 3A), Elsevier (North Holland), Amsterdam, 1560-1695.

Bojer, Hilde (2005) The Social Contract, Child Care and Women's Economic Capability. in Flavio Comin and Martha Nussbaum (Eds.), Capabilities, Gender, Equality, Cambridge University Press.

Bojer, Hilde (2006) Income capability and childcare (mimeo) University of Oslo, Oslo

Farfan-Portet, Maria Isabel, Jean Hindriks, and Vincent Lorant (2008) Progressivity of Childcare Tax Policies in Belgium. Louvain Economic Review 74(2):143-165.

Ghysels, Joris, and Wim Van Lancker (2009) Het Matteüseffect onder de loep: over het ongelijke gebruik van kinderopvang in Vlaanderen (CSB-Berichten, Herman Deleeck Centre for Social Policy Antwerpen

Gustafsson, Björn, and Urban Kjulin (1994) Time use in child care and housework and the total cost of children. Journal of Population Economics 7(3):287-306.

Kornstad, Tom, and Thor D. Thoresen (2007) A discrete choice model for labor supply and childcare. Journal of Population Economics 20(4):781-803.

Lewis, Jane, and Susanna Giullari (2005) The adult worker model family, gender equality and care: the search for new policy principles and the possibilities and problems of a capabilities approach. Economy and Society 34(1):76-104.

Minnen, Joeri, and Ignace Glorieux (2004) Kinderen maken het verschil: over de invloed van kinderen op het tijdsbestedingspatroon van ouders. Tijdschrift van de gezinsbond-studiedienst 33(1):2-10.

Nussbaum, Martha (2003) Capabilities as Fundamental Entitlements: Sen and Social Justice. Feminist Economics 9(2-3): 33-59

Robeyns, Ingrid (2005): 'The Capability Approach: a theoretical survey.' Journal of Human Development 6: 93-114.

Rönsen, Marit (2009) Long-term effects of cash for childcare on mothers' labour supply. Labour 23(3):507-533.

Sen, Amartya (1999) Development as freedom. New York: Knopf

Sen, Amartya (1985) Well-being, Agency and Freedom: the Dewey Lectures. Journal of Philosophy 82(4): 169-221

Sousa-Poza, A., H. Schmid, et al. (2001). The allocation and value of time assigned to housework and child-care: An analysis for Switzerland. Journal of Population Economics 14(3): 599-618

Van Klaveren, Chris, and Joris Ghysels (2009) Collective labor supply and childcare expenditures in the Dutch speaking region of Belgium (mimeo) Maastricht University/Antwerp University, Maastricht/Antwerp

Verbist, Gerlinde (2002) *An Inquiry into the Redistributive Effect of Personal Income Taxes in Belgium*, Doctoral dissertation, Antwerp, UFSIA, University of Antwerp

Annex

TABLE A.1: THE DISTRIBUTION OF PAID EMPLOYMENT AMONG FATHERS IN DUAL-EARNER FAMILIES

N (observations)	574
Mean	43h11'
Minimum	3.5 hours
Maximum	167.0 hours
Percentiles	
10	25.0 hours
25	38.0 hours
50	42.5 hours
75	51.0 hours
90	60.0 hours
95	68.0 hours

Source: FFCS (2004-2005)

Note: the original measurement is in half hour units

TABLE A.2: TIME SPENT AT SCHOOL ACCORDING TO THE AGE OF THE CHILD

Age	Median	Mean	S.E.	Minimum	Maximum	N	Proposal
0	0.00	0.00	0.00	0.00	0.00	45	0
1	0.00	0.23	0.17	0.00	9.75	69	0
2	0.00	6.52	1.48	0.00	43.42	60	0
3	24.96	22.49	1.63	0.00	40.00	46	25
4	28.43	27.25	1.30	0.00	49.75	46	28
5	31.50	29.66	1.05	0.00	46.50	61	30
6	30.42	28.57	1.23	0.00	43.00	40	30
7	29.49	27.06	1.16	0.00	43.17	62	30
8	33.36	34.99	1.92	13.50	103.50	58	30
9	29.00	25.92	1.03	0.00	39.75	73	30
10	26.75	22.60	1.66	0.00	40.50	49	30
11	30.55	27.68	1.21	0.00	41.67	66	31
12	30.75	27.01	1.62	0.00	43.17	55	31
13	35.50	32.12	1.46	0.00	52.75	69	32
14	26.00	25.02	1.83	0.00	45.75	51	32
15	33.50	27.88	1.63	0.00	53.00	74	32

Source: FFCS (2004-2005)

Note: the original measurement is in half hour units