

MEMORANDUM

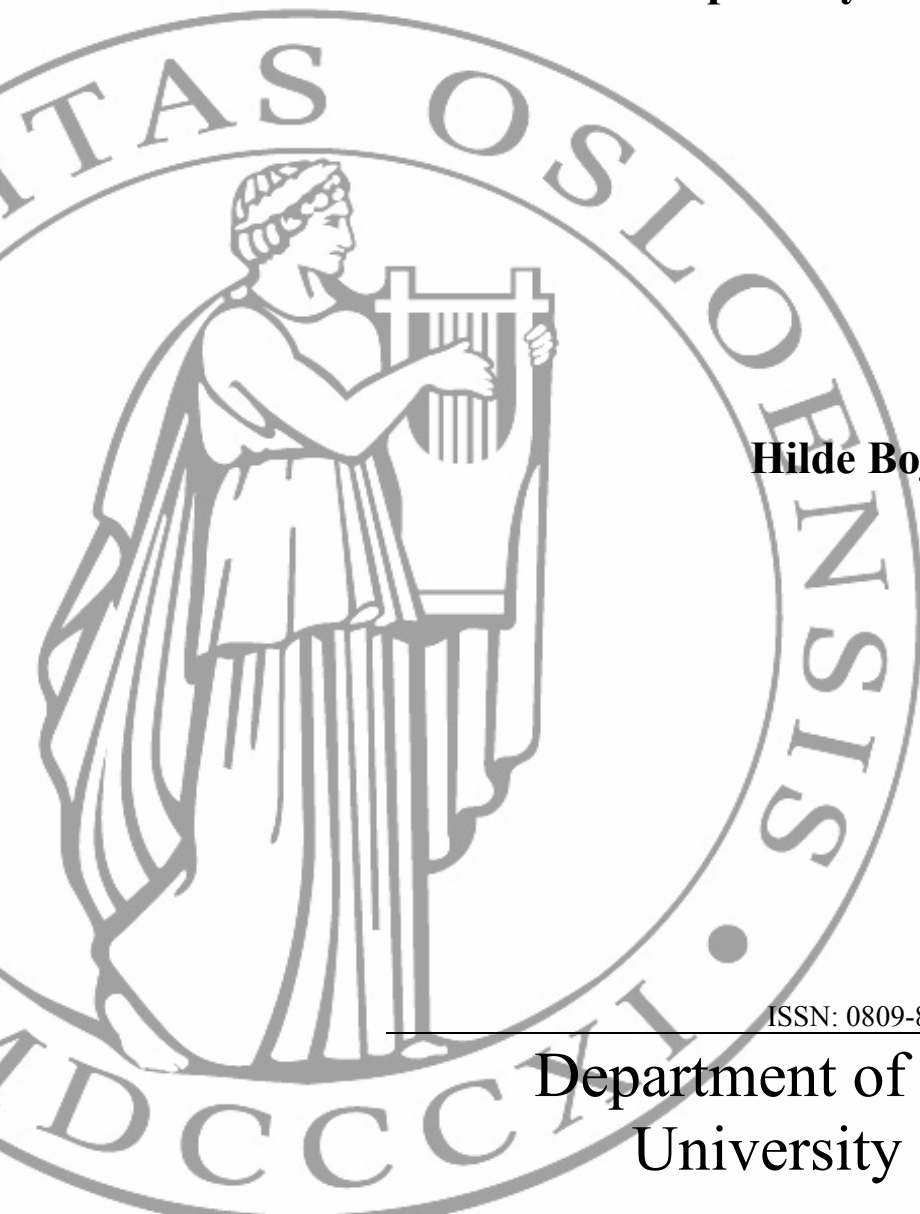
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Income Capability and Child Care

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Income Capability and Child Care

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Abstract

This paper has a twofold purpose. It argues firstly, that analysis of income distribution should be a part of the capability approach. Secondly, it argues that the capability approach is a good theoretical foundation for analysis of income distribution. The capability approach to human advantage has not hitherto been applied in mainstream analysis of income and wealth. The paper argues, on the one hand, that the capability approach needs to include a measure of access to economic goods; on the other hand that a capability definition of income avoids some problems inherent in the traditional, welfarist approach. A modified full income is proposed as a measure of income capability. Modified full income is Beckerian full income corrected for inter alia constraints on time. Time needed to care for children (and other dependants) is a constraint on available time. The capability approach will seek to compute the cost of children (and other special needs) by identifying moral and legal constraints on time and other resources through open democratic discussion rather than econometric estimation.

1 Introduction

One purpose, and perhaps the main purpose, of analysing the distribution of income is to investigate whether the distribution is a just one. In order to make sense in such a connection, the analysis should be related to a theory of justice in distribution. In particular, the variable to be analysed ought to correspond to a magnitude whose distribution is relevant to justice. In empirical analysis of income distribution, it is generally taken for granted that the underlying variable of interest, the *distribuendum* of justice and of economic policy, is welfare, sometimes limited to ‘economic welfare’ or ‘material well-being’.¹ In the political and moral philosophy of distributional (social) justice, this position is called *welfarism*.² Amartya Sen has introduced the term welfarism into contemporary philosophic debates. He defines welfarism as follows:

Welfarism in general and utilitarianism in particular see value, ultimately, only in individual utility, which is defined in terms of some mental characteristic, such as pleasure, happiness or desire. (Sen 1992: 6)

Sen is one of several contemporary philosophers who do not accept welfarism as a proper basis for distributional and social justice.³ The first prominent critic of welfarism (or utilitarianism) was John Rawls in his famous *A Theory of Justice* (Second edition Rawls 1999). It is difficult to summarise his detailed and profound criticism. One of his main points is the following: A liberal society is one that allows many different, even incommensurable, conceptions of the good in its citizens. Its distributional policy cannot therefore be based on one single such conception, namely the pursuit of personal welfare.⁴ Another notable contribution came from Ronald Dworkin (1981) in

¹See e. g. Smeeding and Weinberg 2001.

²The term welfarism was apparently coined by John Hicks in 1948 (reprinted 1981).

³A concise overview of criticisms of welfarism is given in Bojer 2003 chapter 4. Note that the criticism concerns welfarism in the normative context of distributional justice, and not, or not necessarily, the assumption of utility maximisation when explaining behaviour.

⁴Modern utility theory includes the possibility of altruism (and envy) in the sense that my neighbour’s welfare may increase (or decrease) my own welfare. But the assumption of this kind of altruism does not break fundamentally with welfarism as a theory of behaviour. I still pursue my neighbour’s good because, and to the extent that, it makes me happy. It does not include the possibility that I do good from a sense of duty, and in spite of considerations of my own welfare. Also, it is difficult to include altruism (and envy) in a normative theory of distributional justice with welfare as the *distribuendum*, since equality of welfare would imply less to the altruist and more to the envious. The problem, in fact, is similar to that of expensive tastes discussed by Dworkin (1981).

his paper ‘What is equality? Part 1: Equality of Welfare’. One of Dworkin’s arguments against equality of welfare is the argument of expensive preferences: some people are unhappy without private jets and Armani suits, others have a sunny disposition and are happy with very little. It does not seem fair, according to Dworkin, that those with modest demands should have to contribute to the luxuries of those with expensive preferences. Like Rawls, Dworkin makes people responsible for their preferences.⁵ Now, in practice, welfarist analyses of income distribution generally assume equal preferences. Against this usage, Sen argues that there are objective differences in needs which a just distribution should take into account. This argument forms part of the background for his capability approach.

The capability approach introduced by Amartya Sen and with Martha Nussbaum as a prominent advocate has aroused much interest and a large literature in recent years.⁶ Its ideas are applied in the UNDP’s Human Development Index (HDI), and it has in general been influential in development economics. But the capability approach is so far more an inspiration than a developed theory. In particular, the capability approach has not, to my knowledge, been applied in mainstream analysis of economic inequality.

In the present paper I shall discuss how the capability approach can be made a basis of defining and measuring income in analyses of economic inequality. I introduce the concept of *income capability*, and argue that the appropriate measure of income capability is a modified version of full income, where the modification includes constraints on time. This income concept is in many respects an improvement on the standard definition of income within the welfarist approach. It is in the definition and measurement of the cost of children that I advocate a break with the welfarist tradition.

Full income as the *distribuendum* of distributional justice also fits in with other contemporary theories of justice than the capability approach. In *A Theory of Justice* John Rawls advocated equality of ‘income and wealth’ without elaborating further on the concept of income, but in a later paper (Rawls 1974) he indicates that full income fits in with his ideas. In *Macro-justice* (2005), Serge Christophe Kolm advocates a system of re-distribution independent of hours worked, which implies that realised cash income cannot be the basis of taxation.

I should, perhaps, make clear at the outset that it is not intended to reduce the whole capability approach to the one dimension of income capability. All its adherents agree that there are many capabilities to be taken

⁵For an enlightening discussion of responsibility and welfare, see also Fleurbaey 1995.

⁶The literature is too large to give more than a few selected references. I find that Sen 1999 gives the clearest exposition, while Sen 1992 includes his definition and criticism of welfarism. My own thinking also owes much to Nussbaum 1999.

into account in economic and distributional policy: the present argument is that income capability should be one of them.

The paper is organised as follows: Section 2 discusses various standard definitions of income, in particular income as consumption and income as rights. Section 3 describes the capability approach while section 4 discusses the relationship between capabilities and income. Section 5 introduces the concept of income capability. Full income is reviewed in section 5.1. In section 5.2 and section 6 I suggest how full income can be extended and modified to become a suitable measure of income capability, and in particular how to take the cost of children into account. Section 7 discusses the income capability of a household. In the last section, I discuss certain practical aspects of the proposed theory.

2 Definitions of income

A generally accepted definition of income is that income is the upper limit of what we can consume in a given period without diminishing wealth. In the words of John Hicks:

The purpose of income calculations in practical affairs is to give people an indication of how much they can consume without impoverishing themselves. Following out this idea, it would seem that we ought to define a man's income as the maximum value that he can consume during a week, and still be as well off at the end of the week as he was at the beginning. (Hicks 1961: 172)

This is the Hicks definition of income.

Another much quoted definition of income is given by George Simons:

Personal income connotes, broadly, the exercise of control over society's scarce resources. It has to do not with sensations, services or goods, but rather with rights which command prices (or to which prices may be imputed). (Simons 1938: 49)

.....

Personal income may be defined as the algebraic sum of (1) the market value of rights exercised in consumption and (2) the change of value in the store of property rights between the beginning and end of the period in question. (Ibid.: 50)

The two definitions are usually taken to be identical. A close reading does, however, show an interesting difference between them. The Simons

definition stresses *rights*: rights to consumption, rights to property, and control over society's scarce resources. The Hicks definition concerns (possible) consumption only. Vilfredo Pareto's discussion of income brings out the difference:

Even the poorest man must be regarded as having sufficient income to keep him alive. It doesn't matter whether this sum comes from the fruit of his work, or whether it comes to him from charity, or indeed whatever source, legal or illegal.⁷

According to Pareto the thief and the beggar both have an income. But neither has *rights* in consumption, or (legal) *control* over scarce resources. They receive an income by the Hicks definition, but not by the Simons definition.

The concept of income capability to be introduced below, is based on the Simons definition rather than the Hicksian one.

There is also the choice of period. The two standard periodisations are, of course, yearly income and lifetime income. In one sense, lifetime income is what we are looking for from the point of view of justice. John Rawls, for instance, discusses the distribution of lifetime (economic) prospects. But the degree to which annual income is an erroneous indicator of lifetime income depends on the degree to which people are able to choose circumstances like education and profession. And, as Atkinson (1983:42-43) points out, for people in precarious economic circumstances, shorter periods than a year may be of importance. I shall mostly have yearly income in mind, but also to some extent discuss the connection to lifetime income.

3 The capability approach

The capability approach is a theory for defining the quality of life, of human advantage. It has evolved in response to the shortcomings of welfarism as well as to the narrowness of income, whether personal or national, as the dominant target of economic and development policy. Capabilities are independent of the preferences of the individual. In common with the Rawlsian concept of primary goods, the capability approach makes the individual responsible for her own preferences, and hence also for her own welfare. Both approaches also include the possibility that the final good of human existence may not be personal welfare; indeed, it is up to each citizen to determine what is the final good, the goal, of *her* life. Therefore, the responsibility of the government

⁷Quoted from Brown 1976:75.

is not to secure the welfare of citizens; that is their own business. The responsibility of the government, and hence the aims of public policy, is to secure for each individual citizen the *capability* to achieve her own goals, which may or may not be her own happiness or welfare.

The originator of the capability approach is Amartya Sen. He describes capabilities as capabilities to achieve valuable functionings. The qualifier valuable here is important, since there are, conceivably, a great many desirable functionings. Examples of valuable functionings are adequate nourishment and social participation. Sen uses the example of lack of nourishment to illustrate the difference between a capability and the corresponding functioning. A starving person lacks the capability to nourish herself. A person who fasts, does so voluntarily. She has the capability of nourishment, but has chosen not to achieve the functioning.

Capabilities are individual. The unit for observing capabilities is always the individual person, not, say, the household. The philosophical basis for the capability approach is *ethical individualism*. Ethical individualism does not imply that people have individualistic behaviour or preferences, still less does it imply egoism as an ethical norm. It does imply that all persons are equally important from a moral point of view.⁸

Sen argues that the capabilities to be targeted by public policy in a given society should be decided on after, and by means of, open democratic deliberation, and refuses to lend his authority to any specific list of such capabilities. Martha Nussbaum has, on the other hand, published a list of minimum or threshold capabilities that she considers applicable in all societies, but which she also considers as a proposal to be discussed.⁹ Some empirical surveys of capabilities have been carried out; these seem to have very similar ideas of which capabilities are the important ones, as Ingrid Robeyns (2003) points out.

Income and wealth are not generally regarded as capabilities. Indeed, Robeyns writes: ‘...I deliberately exclude economic resources, as these do not constitute a capability. (Robeyns 2003: 73)’ By the term ‘economic resources’, Robeyns seems to mean either income or income and wealth, in accordance with a fairly widespread, but in my view unfortunate, usage.¹⁰ But it is hard to see how any analysis of distribution, or any distributional policy, can avoid treating access to economic goods in one form or another. One reason is the fact that taxes and transfers are important instruments of distributional policy. They will not lose importance in a policy that tar-

⁸On ethical individualism, see e.g. Dworkin 2000:446-452

⁹See Nussbaum 1999 and 2000.

¹⁰She is more precise in Robeyns 2005.

gets capabilities, since capabilities are not themselves transferable from one individual to another; nor can they in most cases be directly controlled or manipulated by the government. Sen repeatedly stresses that income is instrumental to capabilities. Precisely, and that is why we need to investigate the role income should play in the capability approach.

Sen clearly regards income as a means of acquiring commodities, which are inputs to be transformed into capabilities. On the other hand Nussbaum (1999:42) has the right to own property and to engage in paid work on her list of threshold capabilities. This right seems to correspond to a capability of earning an income. The relationship between capabilities and income is therefore far from straightforward.

4 Capabilities and income

I now turn to Amartya Sen's discussion of the relationship between income and capabilities in *Development as Freedom*, chapters 3 and 4. Here, he writes: '...income - properly defined - has an enormous influence on what we can or cannot do. (1999: 72)' But he also identifies 'at least five sources of variation between our real incomes and the advantages - the well-being and freedom - we get out of them. (1999: 70)' These are: (1) distribution within the family, (2) differences in relational perspectives, (3) environmental diversities, (4) variations in social climate and (5) personal heterogeneities.¹¹ He does not, however, tell us on which definition of income he bases the list, even though he stresses that income must be 'properly defined'. The context makes it sufficiently clear that what he has in mind is income as a measure of possible consumption, that is, the Hicksian definition of income. Moreover, he also seems to have in mind cash income, which measures, more or less, access to market commodities.

Sen's criticism of income can be grouped into two kinds. One concerns income as a measure of possible consumption, the second concerns consumption as a measure of capabilities. Distribution within the family and environmental diversities I would class as concerning income as a measure of consumption. The physical environment is an economic good, and a public one. The argument of environmental diversities shows that access to individual commodities is not the only indicator of possible consumption, and should be supplemented by other indicators. But it does not indicate that income is a faulty measure for consumption of individual economic goods. (market commodities).

¹¹The numbering is mine, and introduced for ease of reference.

The argument of distribution within the family is of central importance, and I shall return to it below.

The remaining items concern the relationship between consumption and capabilities. By the second item, ‘differences in relational perspectives’, Sen means that many valuable capabilities depend on our affluence relative to that of the rest of society. The point is well known from the literature on relative poverty, but does not only apply to people below the poverty line. It is one of the most important insights of the capability approach, with profound consequences for policies of development and growth. But it does not make superfluous the measuring of income; on the contrary, for relative incomes to be known, absolute incomes must first be measured.

‘Variations in social climate’ I interpret as concerning rights and liberties, not access to economic goods.

The last item on the list is (5) ‘personal heterogeneities’. The dissimilarities (heterogeneities) refer to needs, not (necessarily) preferences; the difference being that needs are conceived of as objective and observable. A standard example is special dietary needs due to for instance pregnancy. I shall argue that a reasonable number of such observable special needs can be dealt with by suitable numerical corrections of income, to be discussed below in section 5.2.

To Sen’s list of ‘sources of variation between our real incomes and the advantages - the well-being and freedom - we get out of them’, I would add at least two other items: leisure and publicly provided individual goods. These are both items of individual consumption.

Leisure (item 6): The deprivation of a man who has to work 12 hours a day to keep body and soul together is inadequately measured by the smallness of his cash income. Also, many women have the responsibility for children and housework in addition to wage labour. So, a given cash income may be associated with very different levels of leisure. In particular, the fact that a person is without any cash income at all may be due to leisure, enforced or not, but may also be due to unpaid work and very little leisure.

Publicly provided individual goods (item 7): Some goods are not technically public in the sense of being non-rivalling, but they are nevertheless provided wholly or in part by the government in many countries. Important examples are social security, health care and education. Such goods have computable values that should be added to income to the extent that they are paid for by the employer or the government. There is obviously a great and important difference between a cash income that has to cover social and health insurance and one that does not.

Sen also does not mention home production, which many authors (e.g Jenkins et al. 1998) now include in their measure of income. I shall discuss

the inclusion of home production below in section 7.

5 Income capability

it seems to me that several of Sen's criticisms of income as well as my own two additions to the list, can be dealt with either by suitable corrections of standard cash income (5 and 7) or by observing suitable indicators of the standard of living and human rights in addition to income (2, 3 and 4). The two items that demand a serious revision of the concept of income, seem to me to be those of leisure and of distribution within the family. In addition, there is the aspect of income that has to do with power and rights, which Sen does not really touch upon in his discussion, but which is one reason why Nussbaum includes the right to own property and earn an income in her list of basic capabilities. Sen also writes about unemployment as being deprivation of a capability, not of income only.

I shall consider first leisure, then distribution within the family and finally income as power before concluding by defining income capability.

In welfarist analysis, the difference between work and leisure is that leisure yields utility, while work does not. Now, not everyone enjoys leisure, while some people enjoy their work. Unemployment, for instance, is enforced 'leisure', a loss of capability, as Sen points out. From the capability point of view, leisure must be defined not as time yielding utility but as *free* time, that is, time when you are free to choose what to do. Also, it is leisure as an option, not a realised fact, that is important to the capability approach.

When studying consumption, distribution within the family is of course of great importance. It is, however, by now well known that this distribution cannot be assumed to equalise the consumption of family members. The norms governing within-family distribution vary not only from country to country, but also within the same country. Amartya Sen was one of the first economists to discuss within-family (or -household) distribution. In Sen 1984, he describes how girls from two neighbouring villages in India were very different with respect to health and physical development because of differences in the internal allocation of food in the households. The girls in one village received a smaller part of the household's food. The necessity of monitoring the standard of living of parents and children, girls and boys, men and women, separately is receiving steadily more attention in development economics. So is the value of targeting aid and development efforts direct towards the education and income making opportunities of individual women, not their households (husbands). Helping women out of poverty is also the

surest way of helping children out of poverty.¹² The knowledge that growth in production and rising standards of living is unequally distributed both within a country and within each separate household forms part of the background for the capability approach and the construction of the Human Development Index.

In advanced, Western countries, there is reason to believe that distribution and decision making in general within the household is influenced by the bargaining power of the individual members, which in turn is determined by their individual economic opportunities outside the household. (Lundberg and Pollak 1993).

Inequality of distribution within households is a reason for monitoring the standard of living of household members separately (as far as possible), as well as providing for individuals separately in distributional policies. For adults, there is a strong case for measuring individual incomes instead of, or at the very least in addition to, household income.

The bargaining model of household decisions also reveals why income is a source of power. But the income that gives power is the income that stems from legally and socially enforceable rights such as : the right to paid labour at a certain wage, legal rights to social security, child benefit or alimony as the case may be. Handouts from charity are not rights.

Sen has often written that the important thing is not the income a person enjoys, but what she is able to do and to be. ‘Capability is thus a kind of freedom: the substantive freedom to achieve alternative functioning combinations (or, less formally put, the freedom to achieve various lifestyles). (Sen 1999: 75)’ Within the capability approach it is the potential income, the income a person might have chosen had she so wished, which is of interest. Consumption of commodities and hence income as a measure of consumption, is a functioning, not a capability.

The capability approach to income should therefore measure the capability to acquire an income, not the income itself. This capability is determined by legally and socially enforceable rights to non-labour income, the size of the obtainable wage, and freedom from time constraints. Considerations of power and the possible inequalities in within-household distribution lead to defining income capability as an individual capability.

The closest approximation I can find to income capability understood as the option of choosing between cash income and leisure is individual full income, determined by available time, the wage rate and by non-labour income; and suitably corrected for the sources of ‘variation’ discussed above: special needs and government paid individual goods like social and health insurance.

¹²See for instance Todaro and Smith 2005 chapter 5.

The non-labour income part consists of capital income and government or private transfers guaranteed by law.

Obviously, this notion of income capability is only applicable to adults. Children's capabilities are another matter; I shall discuss some aspects of their economic position in section 7 below.

If income capability measures options, possible choices, it is important to have in mind that the options any given year will to some extent be determined by past choices, at least for some persons in some societies. This last reservation is made because the majority of the earth's inhabitants do not really have many options to choose between. They cannot choose between working and not working, marrying or not marrying, never mind choice of education and profession. This is particularly true for women.

I shall discuss the income capability corresponding to annual income. Then, the constraints determining capability will inevitably at least partly be due to previous choices made. But the same is true of standard annual cash income.

5.1 Full income

The concept of full income is not new; it was introduced by Gary Becker (1965). Full income as a theoretical concept is widely applied in labour market economics and fertility analysis, but has not to my knowledge been empirically measured and applied in analysis of economic distribution. The difference between full income and standard income is that full income includes leisure.

In symbols:

$$FI = wT + MI \tag{1}$$

where w is the wage rate, MI is non-labour income and T is available time, say 16 hours a day.

Let two persons, A and B, have equal non-labour incomes ($MI = 0$), but different wage rates, so that $W_A > W_B$. The relationship between their cash incomes (I) may well be different: $I_A < I_B$ because they have different hours of paid work.

Gary Becker, and after him economic theory, treats these different outcomes as the results of free choice between paid work and leisure, determined by the preferences of a utility maximising consumer. In the capability approach, the motives for the choices made are not important. What is important, is the capability of choosing, in other words, we must seek to identify the constraints on choice.

And there are other constraints on choice than those represented by equation (1): constraints on time and constraints on consumption. Working hours may be fixed by the employers, so that the only choice is between having paid work full time or not at all. There are social, more or less informal but nonetheless real and strict, constraints on how both women and men should spend their time. For women, particularly mothers, having paid work may be frowned upon. Conversely, employers may expect male workers to work overtime regardless of obligations to the family.

The assumption of a constant wage rate is also unrealistic. It does not, for instance, take into account extra pay for overtime, nor varying tax rates.

Full income is determined partly by personal endowment (human capital), measured by the wage rate, partly by social, economic and legal features of the surrounding society. These features of society determine to which extent equation 1 is the only constraint on choice. In particular, a great number of persons, children apart, in any society have no choice at all between paid work and not paid work. For disabled and retired persons it is natural to set the wage rate equal to zero: they are dependent on pensions, or, in some societies, charity. I would suggest the same procedure for the unemployed. For persons that are unemployed and able-bodied and of sound mind, it might be reasonable to add a certain sum, or assume a small wage rate, to take the possibility of home production into account. Married women in cultures where they are denied the possibility of paid work would also have a wage rate equal to zero, and hence no income capability.

I shall discuss three types of constraints on time and consumption: special needs, consumption costs of children and socially necessary unpaid work (time cost of children). Some, or all, of these constraints, may be due to previous choices. The case of children is in particular the subject of much discussion. But the wage rate may be influenced by decisions on education and career choice, and special needs may be due to risks deliberately incurred. These problems are no different in the case of income capability than when measuring standard cash income. It is for example regular practice to correct household income per equivalent adult for economies of scale in the household: but marriage and cohabitation are as much voluntary decisions as having children is.

5.2 Special needs

The standard example of different needs used by both Sen and Nussbaum is differences in nutritional needs. These are, of course, of great importance to people living on or near subsistence level. But there are many other cases of different needs which are of importance at all levels of wealth: differences

due to chronic illness and/or physical and mental handicaps. This is where people need different quantities and qualities of commodities in order to obtain basic capabilities: some need glasses in order to see, others need crutches or prosthetics in order to be able to move.

These needs can be measured in money, namely the cost of medicines and physical equipment needed. The monetary values of commodities needed are generally already known, more or less approximately, since in many countries, the supplementary costs are covered by governmental or private insurance, at fixed rates. There is a limited, though large, number of different cases. In each case, the necessary sum must be deducted from full income in order to compute the individual's real options. The sum to be deducted is the person's outlay net of public subsidies where these apply.

To be sure, it may in some cases be impossible to achieve normal capability, and sometimes the achievement of a basic capability may be prohibitively expensive. This is one of the unsolved problems of the capability approach.

Medication and other medical aids may enable the person to undertake paid work, and are therefore both a result of, and an input into, income capability.

6 The cost of children

6.1 Consumption costs

Children cost time and money: time that the parents have to spend on their care, and money spent on the children's consumption. In economic analysis, children are mostly considered either as individual goods acquired by the parents for their own pleasure (Becker 1991), or as public goods (Folbre 1994). In analysis of justice in distribution, they are neither, but human beings with rights of their own. Hence, the cost to parents stem from the children's rights to care and consumption, and the parents' ensuing obligations to provide these. Acquiring children may in modern society be a free choice. Spending a minimum of care and money on the children, once they are there, is not. Parents have obligations towards their children; moral obligations everywhere, in most societies also legal obligations. Moreover, these obligations are independent of the pleasure parents may or may not take in being parents. There is therefore no reason to distinguish between the conditional and unconditional cost of children; these concepts arise out of the welfarist approach.¹³

¹³The unconditional cost of children is defined as the welfare loss to parents due to children's consumption less the welfare gain obtained from having children.

There is a considerable literature on the problem of determining the consumption cost of children. The results vary widely, and there is no consensus on what the right answer is. I would suggest that the reason for the lack of consensus is that there is no answer that is, objectively, the right one. I think we should get further by owning outright that determining the cost of children is an evaluative exercise. It is the answer to a normative question, namely: how much *ought* society allow for children's consumption.

The main body of the existing empirical literature is devoted to computing the sums that parents actually, on average, spend on their children. But actual expenditure is an outcome of choice. Children cost the amount of time and money that parents are able and willing to spend on them. This average expenditure will, of course, vary from society to society, depending both on the society's wealth and on accepted social norms. Sen's observation in Sen 1984, referred to above, showed that parents in one village gave more food to their sons than to their daughters. There is reason to believe that such an unequal distribution is not uncommon in India. Could observed expenditure of this allocation be morally acceptable as basis for computing the cost of sons and daughters?

The capability approach to evaluating the cost of children would be to acknowledge the normative content of the exercise. It would seek to estimate the constraints on parents' choice given the presence of children. Since we are looking for moral and legal constraints, the costs should not necessarily be estimated from observations of parents' actual spending. Sen claims that an advantage of the capability approach is that it is open for democratic discussion. The capability cost of children might well be decided on in this spirit. I tend to be of the opinion that the cost in terms of commodities should be independent of the parents' income, and should represent societal consensus (or majority opinion) on what the minimum legal and moral obligations of parents are towards their children.¹⁴

Both empirical investigations of actual expenditure and experts' estimations of necessary cost would be valuable inputs into normative deliberations, but it should be made clear that they are inputs only, and that there is no 'right' amount to be scientifically established.

6.2 Time cost of children and unpaid work

The time cost of children will depend on the wages of the parents. However, the time itself, the number of hours per day or days per year, necessary for the

¹⁴It is interesting that in the article that spawned the whole literature on conditional and unconditional cost, Pollak and Wales (1979) recommend the estimation of children's minimum requirements.

care of children, is independent of wages or income, and should be determined by methods similar to those recommended for necessary consumption. It will vary with the age of the child, from 24 hours a day for the new born infant, and decreasing with the age of the child, but never becoming zero as long as the child is a minor.

Unpaid work is one constraint on available time. Now, unpaid work is, of course, sometimes chosen voluntarily, and may be difficult to distinguish from leisure pursuits (hobbies). The criterion used in empirical work to distinguish unpaid work from leisure is the third-person criterion: an activity is unpaid work if it is technically possible to have someone else do it for you, paid or unpaid. Baking bread is unpaid work, a work-out is leisure. Another possible criterion, more difficult to observe, is the possibility of choice: leisure is *free* time, when you have a free choice of activities. Time spent on unpaid work is, by this criterion, time when you have obligations toward others, time when you have no choice but to work. The two criteria do not, in general, coincide. The baking of bread may be undertaken as a hobby, but may also be a necessary duty.

Caring for children and infirm or sick dependants is, however, work according to both criteria. It has to be done by somebody, whether the person cared for is able to pay for the care or not. Parents must either care for their children themselves or pay someone else to do it for them. Indeed, leisure, free time, is scarce for parents in modern society.¹⁵ Children's need for time measured in hours is absolute, and does not depend on the parents' income. The money value of the time will, however, vary with the real wage of the parents. Time needed for child care consists of two parts: necessary time spent by the parents and time hired from a third person (day care centre, nanny). Both must be deducted from time available when estimating income capability.

Let me assume for the moment that there is just one parent. The price of the parent's time will be his or her own wage rate. The third-person time will be priced at the market wage for child carers. This wage may, of course, be higher than the wage rate of the parent.

Now, let p be the price per hour of outside child care, and w the parent's wage rate, T_0 is necessary parent time, T_1 is third person time. The care cost of a child will now depend on whether $w > p$ or $w < p$. If $w > p$, the parent is able to earn her own income and use part of it to pay for child care. But if $w < p$, she will not be able to afford outside child care.

$$C_T = wT_0 + pT_1 \quad \text{if } p < w \quad (2)$$

¹⁵See e.g. Vaage 2002: 184

$$C_T = wT_0 + wT_1 \quad \text{if } p > w \quad (3)$$

Equations (2) and (3) express the care cost in money. It can also be represented in terms of time, the time a parent must work to cover her child's need for care:

$$T_C = T_0 + \frac{p}{w}T_1 \quad \text{if } p < w \quad (4)$$

$$T_C = T_0 + T_1 \quad \text{if } p > w \quad (5)$$

In the above equations, I have assumed that the parent will care for the child herself if $p > w$. Above a certain age, this is not necessarily the best solution for the child. Again, the best division of care time between private and professional should be decided by open public discussion. Also, I have not taken into account the fact that it is often technically possible to combine child care at home with other activities. This fact might be represented by subtracting a sum from home care cost.

The total cost of children is the sum of consumption cost and care cost, which can again be computed in time or money.

The income capability of adults should be measured individually. Then, the cost of children (and other dependants) must be individually assigned. There is no simple answer to how this should be done when a child lives with both parents. Immediately after the birth and during breastfeeding, the care time must be assigned to the mother and deducted from her full income. Later, there is no biological reason why the time cost should not be equally divided between the parents. In many countries, social norms would perhaps support the equal division. In other countries, social norms unequivocally call for the mother to spend time caring for children. Even in countries where many people feel that father and mother have equal moral obligations to spend time with the children, the time burden in practice falls on the mother. I suggest parents be interviewed about how they divide the time spent caring for children, and that the time cost be individually assigned according the answers received. The consumption cost it seems most reasonable to divide equally.

7 Children and the household

Income capability as I have defined it, does not make sense for children. Children are not expected, in most modern societies, to earn their own income. Still, economic provision for children is an important part of distributional

policies, again in most societies. And children are, of course, dependent on the parents' ability (and willingness) to provide for them. When investigating the economic conditions of children, it is therefore necessary to investigate the economic conditions of the parents, providers or provider, as the case may be. We can only get to know the economic position of children by studying how capable the parents are of supporting their children economically. Hence the need for a concept of household or family income.

There is a case, however, for modifying the concept of household income along the same lines as I have advocated for individual income capability. The standard measure is, of course, disposable household cash income per equivalent adult. Equivalent adult scales are normally based on consumption cost only (and economies of scale in consumption), and do not include the time cost of children, (where there are also possible economies of scale). Moreover, a given cash income will give different consumption possibilities depending on time available for household production. There is a considerable difference between 50 000 Euros earned by two partners in full time jobs and the same income earned by a husband with a full time housewife. In the last case, there will be her home production to add to the consumption of the couple.

But I think full income will be a better measure of their consumption possibilities than so-called extended income which includes household production. Household production may be at the cost of leisure. Two households with equal extended incomes may well have different full incomes; the difference is due to different hours of leisure. For these reasons, when it comes to couples, the sum of their individual full incomes will usually give a truer picture of their combined consumption possibilities than does either the sum of their cash incomes or their total extended income. In other words, I suggest we measure the sum of their income capabilities as previously defined, where *inter alia* the full cost of the children is deducted. This magnitude we might call the income capability of the household. This capability is the difference between the parents' total income capability and the socially acceptable consumption and time cost of their children. The difference may well in some cases be negative, particularly for single parents.

I should, however like to make a reservation for the case of societies where married women for legal or cultural reasons have no economic options outside the family. It would not be reasonable to set equal to zero their contribution to household consumption.

Income capability is particularly suited to express the real difference in economic circumstances between single providers and couples with children. The couple will have twice as much time as the single provider has to divide between caring for children and earning an income.

It is important to make clear that what I called the income capability of the household measures the capability, that is, the possibility of the parents to consume commodities and leisure after having provided for their children according to accepted standards. Like the conventional measure of household income per equivalent adult, it says nothing about what parents actually do. The life quality of children must be monitored separately.

8 Some practical considerations

All the data needed to compute income capability are of the kind already collected through household panels and in labour force surveys. In particular, the questions needed are neither more nor less intrusive. More attention would be needed to constraints on time, like the questions now asked in many labour force surveys about preferences for shorter or longer hours. Questions would also be needed about the wage rate in present or, for the unemployed and for homeworking housewives, past occupations. Couples with children (or other dependants) should be interviewed about how they share time spent in care work.

Finally, some words on the feasibility of deciding on the rights of children in democratic deliberation instead of by expert calculations. The so-called costs of children are, in fact, administratively and/or politically decided on in many cases in connection with tax schedules, child benefits, welfare contributions and alimony. Arguments that these are too small, or too large, are, I feel, better based on considerations of rights and social justice than on scientific, expert judgements. Also, acceptable standards will vary from society to society, depending both on the general affluence and on the social and political mores of that society.

Democratic deliberation on standards is an important part of the capability approach.¹⁶ Amartya Sen writes:

Furthermore, the need to discuss the valuation of diverse capabilities in terms of public priorities is, I have argued, an asset, forcing us to make clear what the value judgements are in a field where value judgements cannot be - and should not be - avoided. Indeed, public participation in these valuational debates - in explicit or implicit form - is a crucial part of the exercise of democracy and responsible social choice. In matters of public judgement, there is no real escape from the evaluative need

¹⁶An excellent discussion of this aspect of the capability approach is found in several articles in *Maitreyee 2006*.

for public discussion. The work of public valuation cannot be replaced by some cunningly clever assumption. (Sen 1999: 110.)

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