
Take-up of Welfare Benefits in OECD Countries:
A Review of the Evidence

Virginia Hernanz, Franck Malherbet
and Michele Pellizzari

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TAKE-UP OF WELFARE BENEFITS IN OECD COUNTRIES: A REVIEW OF THE EVIDENCE

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The views expressed in this paper are those of the authors, and do not necessarily reflect those of the OECD or of its member countries.

SUMMARY

1. This report provides an overview of the limited empirical and theoretical research on take-up of welfare benefits, *i.e.* the extent to which people eligible for various types of benefits actually receive them. Focus is mainly on entitlement programmes, where take-up reflects both decisions of eligible individuals to apply for benefits and the accuracy of administrative decisions as to whether these individuals should get the benefit in question or not. Estimates of the extent of take-up of welfare benefits are based on a variety of approaches, and typically combine both administrative and survey data. Despite these methodological differences, and the very few OECD countries for which estimates are available, the evidence reviewed in this paper suggests that low take-up of welfare benefits occurs both across countries and programmes. Estimates typically span a range of between 40% and 80% in the case of social assistance and housing programmes, and between 60% and 80% for unemployment compensation.

2. Low or declining rates of take-up of welfare benefits may be a cause of concern for policy makers, as they reduce the probability that welfare programmes attain their goals (*e.g.*, to reduce poverty through higher benefits), lead to unjustified disparities of treatments among eligible clients, and reduce the capacity to anticipate accurately the financial costs of policy reforms. Whether these concerns are justified depends on the determinants of take-up. Factors discussed by the economic literature include levels and duration of benefits (more generous benefits granted for longer periods lead to higher take-up), information about a programme's rules and application procedure, delays and uncertainties about the application outcomes, and social and psychological factors such as stigma. While empirical studies typically provide evidence of the importance of these factors, their relative role varies across programmes, countries and individuals. The report concludes by discussing measures that could improve take-up of welfare benefits: simplification of administrative procedures; consideration of the interactions between different programmes; and the production of better empirical evidence and research.

RESUME

3. Cette étude examine les quelques travaux de recherche, empiriques et théoriques, dont on dispose concernant le recours aux prestations sociales. En d'autres termes, il s'agit de la mesure dans laquelle les personnes potentiellement admissibles à différents types de prestations ont effectivement recours à ces prestations. On s'intéresse tout particulièrement aux dispositifs de prestations pour lesquels le taux de recours reflète à la fois une démarche volontaire de la part des personnes admissibles pour pouvoir en bénéficier et l'exactitude des décisions administratives concernant l'éligibilité ou non de ces personnes aux prestations en question. L'étendue du recours aux prestations sociales est estimée à partir de différentes approches qui, en règle générale, conjuguent données administratives et données d'enquête. En dépit de la diversité des méthodes et du très petit nombre de pays de l'OCDE pour lesquels des estimations sont disponibles, il semble que le taux de recours aux prestations sociales est faible, et cela quels que soient les pays et quels que soient les dispositifs. Les estimations se situent généralement entre 40 pour cent et 80 pour cent pour les prestations d'aide sociale et les prestations logement, et entre 60 pour cent et 80 pour cent pour les prestations de chômage.

4. Des taux de recours aux prestations sociales faibles, voire en baisse, peuvent être une source de préoccupation pour les responsables gouvernementaux. Ils réduisent la probabilité que les programmes sociaux atteignent leurs objectifs (faire reculer la pauvreté, par exemple, en accordant des aides plus généreuses), entraînent des disparités de traitement injustifiées dans la population des ayant droit, et rendent plus difficile d'anticiper correctement le coût financier des réformes. L'importance de ces différentes préoccupations dépend des facteurs déterminant le non-recours aux prestations. La littérature économique envisage divers facteurs: niveau et durée des prestations (plus les prestations sont généreuses et accordées sur de longues périodes, plus le taux de recours est élevé); qualité de l'information sur les règles d'admission aux dispositifs et sur les procédures à suivre pour présenter une demande; délais d'attente et incertitudes entourant le résultat des demandes; et facteurs sociaux et psychologiques, telles que les phénomènes de stigmatisation sociale. Si les études empiriques montrent, en règle générale, que tous ces différents facteurs sont présents, leur importance relative varie selon les dispositifs, les pays et les personnes. L'étude recense, en conclusion, des mesures susceptibles d'améliorer le taux de recours aux prestations sociales. Ceux-ci incluent une simplification des procédures administratives, la prise en compte des interactions entre les différents dispositifs, l'élargissement de la base de données empiriques, et l'approfondissement des travaux de recherche.

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TAKE-UP OF WELFARE BENEFITS IN OECD COUNTRIES: A REVIEW OF THE EVIDENCE

Introduction

5. This report provides an overview of the empirical and theoretical research on take-up rates of welfare benefits in several OECD countries. Take-up rates are here defined as the ratio between the number of individuals, or households, who are receiving a certain benefit and the total number of those who are eligible for it. Take-up rates below 100% indicate that some of those who are entitled to a welfare programme are not receiving it.

6. It is important to distinguish between take-up rates and two other concepts that are often confused with it. The first, sometimes called the “participation rate”, refers to the share of the total population that receives a given benefit. For example, in the case of minimum income schemes, the participation rate represents the share of the total population that receives minimum income supplements. Alternatively, participation rates can be computed relative to some “target group”, for example as the fraction of the poor who receive welfare assistance.¹

7. The second concept is what Queralt *et al.* (2002) have called the “service rate”. In some cases, the number of individuals who receive a benefit is limited by some physical or financial constraint on the supply side. For example, in the case of child-care subsidies, as available in most US states, available places for free or subsidised child care are limited and filled on a “first-come, first-served” basis. The same applied to the (pilot) local-level minimum income schemes in Italy, where applications were accepted only up to a budget limit. In these cases, not all of those who are entitled to participate in a given welfare programme can get access to it, even if they apply. The ratio of served individuals, or households, over the total number of eligible cases is called the service rate.

8. While related to each other, these three concepts (take-up, participation and service rates) represent very different phenomena. Participation rates measure the extent and dimension of welfare programmes, or their effectiveness in reaching some target group. Low service rates reflect financial constraints on the supply side of welfare provision: either the government agency, or any other institution offering benefits and services, are constrained in doing so because of lack of funds and this leads to some eligible individuals not having access to welfare. On the other hand, in the case of entitlement programmes, low take-up rates are normally the outcome of decisions of welfare clients (the “demand” side of welfare programmes), when eligible individuals choose not to apply for benefits, and of behaviours of the welfare administration (the “supply” side of programmes), when these have discretion to refuse applications and when programme rules and practices can indirectly influence the demands of potential clients. In principle, for some types of programmes, low numbers of participants may reflect low levels of both the service and take-up rates, and disentangling the two effects can be complicated. However, for the majority of welfare programmes, eligibility and access rights are defined by the law so that no one who is entitled to welfare benefits can be denied access to them on the ground of a resource-constraint confronting the administrative

1 Evidence on participation in, and dependency from, different types of welfare programmes is described in OECD (2003).

agency. This feature of entitlement benefits, combined with public provision of most of welfare programmes, allows analysing take-up rates independently of constraints on the size of the financial resources of the administration.

9. This report reviews evidence on the extent and determinants of take-up rates for welfare benefits in OECD countries, relying on information from both administrative sources (for those few countries that collect it) and, most often, academic studies. The report is limited in at least three dimensions. First, information on take-up rates for welfare benefits is available only for a small minority of OECD countries.² Because of this, the evidence provided below is only *suggestive* of the types of patterns that could hold if information for a larger number of countries were available. Second, this review relies mainly on an economist's approach to the problem. While some sociological studies are also reviewed, they are a strict minority, and their findings are discussed in relation to the economic literature. Third, the scope of the report is limited in the types of benefits that are analysed: the focus is mainly on welfare benefits offered to the working-age population, thus excluding pensions; and on monetary benefits, thus excluding benefits in-kind. There are, however, some exceptions. For example, evidence from the numerous papers that have looked at the Food Stamps Program in the United States – a welfare scheme that offers vouchers for buying basic food products to low-income families – are also reviewed in this report. Most of the evidence gathered refers to social assistance, unemployment, housing, and child and family benefits.

Different dimensions of take-up

10. Following van Oorshot (1996), it may be useful to distinguish three dimensions of take-up:

- *Primary or secondary non take-up.* The most common type of non take-up is when eligible individuals do not claim their benefits. In this case non take-up is said to be “primary”, as it stems from the decision by potential beneficiaries not to claim their entitlement. In other cases, eligible people may apply for benefits but have their application rejected. In this second case, non take-up is said to be “secondary”. The distinction between primary or secondary non take-up draws attention to both agents' behaviour (*e.g.*, the difficulties encountered to understand the procedure or to provide the required information) and administrations' activities (*e.g.*, errors in the evaluation procedure, loose programme rules, or discretion in the decision of administrative officials) as possible determinants of non-take up.
- *Total or partial non take-up.* Eligible individuals who decide not to participate in a programme, as well as those whose claim is rejected, will not be granted any allowance. In this case, non take-up is said to be “total”. “Partial” non take-up corresponds to a situation where an eligible person claims a benefit but receives only part of it. Partial non take-up may originate from both inaccurate information provided by the claimant and evaluation errors made by the administration.
- *Permanent or temporary non take-up.* Eligible individuals may take some time to become aware of the existence of a welfare programme, to realise that they are eligible, to apply for it, and to effectively receive benefits. In addition, claiming a benefit is a costly and time-consuming procedure, and some eligible individuals may decide not to claim a benefit because the expected duration of the benefit spell is too short or the value of the benefit too low.³ Non take-up is said to be “permanent” if the person does not claim for benefits between the moment he or she becomes

2 This report has reviewed studies of various welfare programmes in Canada, Denmark, France, Germany, Greece, Netherlands, the United Kingdom and the United States.

3 For example, an unemployed worker whose unemployment spell is expected to be short may decide not to claim unemployment insurance benefits.

eligible and the moment eligibility expires. Non take-up is said to be “temporary” when it reflects time-lags between claiming the benefit and actually receiving it.

11. The evidence provided below will try, whenever information is available, to distinguish between these different dimensions of take-up rates.

Why is low take-up of welfare benefits a policy problem?

12. The policy interest in take-up rates of welfare benefits typically comes from the observation – or suspicion – that, in many countries and for many welfare programmes, not all of those who are eligible for benefits actually receive them. Low rates of take-up of welfare benefits, when they materialise, are a cause of concern for at least three reasons. First, whatever the aim of a welfare programme, the fact that it only reaches a fraction of those that are supposed to benefit reduces the chances that it will reach its goals. The evidence provided in Figure 1, relative to the United States, suggests that significant reductions in the number of “poor” and “extremely poor” individuals could be achieved if all low-income families with children took full advantage of the welfare benefits available to them.

Figure 1. Number of people in families with children living in poverty and extreme poverty in the United States, under alternative assumptions about take-up rates of welfare benefits



Note: The height of the bars indicates the number of people living in families with children counted as “poor” or “extremely poor” in the two years shown. The dark part of the bar indicates the reduction in the number of poor people that could be achieved if all those entitled to benefits (food stamp, Supplementary Security Income, and Temporary Assistance for Needy Families) took full advantage of them. Poverty is here measured with reference to a broad notion of “household disposable income”, which includes all government assistance and deducts federal payroll and income taxes, as well as out-of-pocket childcare expenses. Poverty is measured with reference to the federal poverty threshold. Extreme poverty is defined as income below 50% of the federal poverty level.

Source: Zedlewski *et al.* (2002)

13. The second reason for addressing the issue of low take-up of welfare benefits relates to equity. When the decision not to take-up a benefit is partly involuntary (*i.e.* when individuals are simply unaware of being entitled, or feel stigmatised when receiving benefits), this will generate disparities of treatment between individuals who should *ex ante* be treated equally by the welfare system. For example, if only the better informed clients gain access to welfare, this may lead to marginalisation of those groups that would benefit the most from participation.

14. The third reason is that better understanding the determinants of take-up decisions by individual agents will allow anticipating more accurately the financial consequences of policy changes. For example, welfare reforms that restrict the pool of individuals eligible for benefits may not lead to substantial savings if more of them decide to take-up their benefits.

15. The evidence reviewed below suggests that low take-up of welfare benefits applies both across countries and programmes. However, there is still little agreement about the *true* levels of take-up rates and

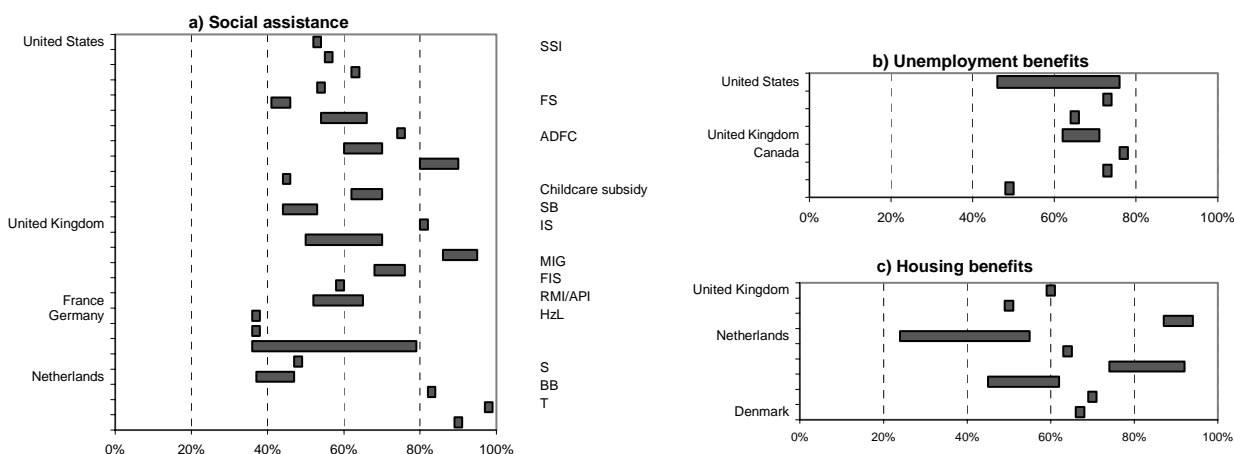
of their determinants. Most of the – relatively small – economic literature on take-up of welfare benefits is also quite unbalanced in its country coverage. This partly reflects the heavy data requirements necessary for the production of reliable estimates of take-up rates. Large-scale micro datasets, containing information on individual incomes and benefits, are needed to estimate take-up rates, and data of adequate quality are not available for many countries. However, this is not the entire story: even in countries where data of this type exist, few (or no) studies seem to have addressed the issue of welfare take-up. Improving our understanding of the phenomenon of non-take-up of welfare benefits will require much more empirical evidence and theoretical work in the future.

Evidence about the extent of take-up of welfare benefits in OECD countries

16. Evidence about the level of take-up of welfare benefits is very limited in most OECD countries. Few government agencies⁴ regularly compile and publish data about how many eligible people eventually take-up welfare benefits. Most of the evidence on the size of take-up of welfare benefits is hence derived from empirical studies which often differ in both their methodological approach and in the range of benefits covered. Findings from individual studies are further described in the Annex.

17. Table 1 describes some of the main features of several studies of take-up rates as available both from academic and administrative sources, while Figure 2 summarises the range of estimated values. A first important feature emerges from this evidence: take-up levels of welfare benefits are often low across many countries and programmes. This is particularly the case for (means-tested) social assistance programmes, where most estimates (limited to 5 OECD countries) are in a range between 40% and 80%. Estimates of take-up rates for housing benefits (limited to 3 countries) span a broader range, with typical values of around 80%. Insurance-based unemployment benefits seem to be less exposed to problems of non-take-up that characterise means-tested programmes, and are typically collected (in the 3 countries for which estimates are available) by about 60% to 80% of those eligible.

Figure 2. Estimates of take-up rates of social benefits in some OECD countries



Note. Estimates, derived from Table 1, refer to the entire population. For social assistance (panel a), estimates refer to different programmes existing in various countries (with programme names indicated on the right-hand axis).

Source: See bibliographical references in Table 1.

4 The British Department for Work and Pensions (DWP) being a notable exception: it regularly publishes accurate estimates of take-up rates for various benefits since 1997.

Table 1. Take-up of social benefits in several OECD countries

Country	Type of benefit	Name of programme	Reference population	Estimated take-up	Time period	
United States	Social Assistance	Supplementary Security Income (SSI)	Entire population	53% - Warlick (1982) 56% - McGarry (1996) 63% - Davies <i>et al.</i> (2001a) 54% - Davies (2001b)	1974-1975 1984 1991 1993	
		Food Stamps	Entire population	41-46% Coe (1979) 54-66% - Blank <i>et al.</i> (1996) 32% (for the working poor) - Kim <i>et al.</i> (1997) 75% - Daponte <i>et al.</i> (1999)	1976-1979 1986-1987 1988-1989 1993	
		Aid to Families with Dependent Children (AFDC)	Entire population	60-70% - Blank (1997) using survey data 80-90% - Blank (1997) using administrative data 45% - Moffit (1983) 62-70% - Blank <i>et al.</i> (1996) 64% (working poor) - Kim <i>et al.</i> (1997)	mid1970s to mid1980s mid1970s to mid1980s 1976 1986-1987 1988-1989 late 1990s	
		Child Care Subsidy	Entire population	44-53% - Queralt <i>et al.</i> (2002)		
	Unemployment Benefits	Unemployment Insurance	Unemployed workers	76-61-46% - Anderson <i>et al.</i> (1997) 73% - Blank <i>et al.</i> (1991) 65% - McCall (1995)	1979 to 1982 1977 to 1987 1982-1991	
		Social Assistance	Supplementary Benefit	Entire population	81% for non-pensioners - Fry <i>et al.</i> (1989) 86% for pensioners - Fry <i>et al.</i> (1989)	1984 1984
	United Kingdom	Social Assistance	Income Support	Entire population	50-70% - Bramley <i>et al.</i> (2000) 64-65% - Pudeny <i>et al.</i>	1996 1997-2000
			Minimum Income Guarantee	Non-pensioners	86-95% - DWP (2003) 68-76% - DWP (2003)	2000/2001 2000/2001
		Housing Benefits	Family Income Supplement	Working families	59% - Dorsett <i>et al.</i> (1991)	1984 to 1987
			Housing benefit	Entire population	60% - Blundell <i>et al.</i> (1988) 50% - Dorsett <i>et al.</i> (1991) 87-94% - DWP (2003)	1984 1984 to 1987 2000/2001

Table 1. Take-up of social benefits in several OECD countries (cont.)

Country	Type of benefit	Name of programme	Reference population	Estimated take-up	Time period
	Unemployment Benefits	Council Tax Benefit Housing benefit Jobseeker's Allowance	Entire population Entire population Unemployed workers	70-76% - DWP (2003) 80-81% (Scotland) - Bramley <i>et al.</i> (2000) 62-71% - DWP (2003)	2000/2001 1996 2000/2001
<i>France</i>	Social Assistance	<i>Revenu Minimum d'Insertion and Allocation de Parent Isolé</i>	Entire population	52-65% - Terracol	1994-1995-1996
<i>Germany</i>	Social Assistance	<i>Hilfe zum Lebensunterhalt</i> (income support) <i>Sozialhilfe</i> (Social Assistance)	Entire population Entire population	37% - Kayser <i>et al.</i> (2000) 37% - Riphahn (2001) 36% to 79% - van Oorshot (1991) –reported 48% - Hartmann (1981)	1976 and 1981 1993 1970s-1980s
<i>Netherlands</i>	Social Assistance	<i>Bijzondere Bijstand</i> (Special Social Assistance) <i>Toeslagenwet</i> (Supplementary Benefits Act) <i>Individuele Huur Subsidie</i> (Individual rent benefit)	Entire population Entire population	37% (in Rotterdam) - van Oorshot (1995) 47% (in Nijmegen) - van Oorshot (1995) 83% - administrative sources 98% - administrative sources 90% - administrative sources 24% to 55% - van Oorshot (1991) –reported 64% - Koning (1997) 74% (in Rotterdam) - van Oorshot (1995) 92% (in Nijmegen) - van Oorshot (1995) 45-62% - Rouwendal (2002) 70% - administrative sources	1990 1990 1994 1994 1999 1975 to 1981 1985-1986 1990 1990 1998 1994
<i>Denmark</i>	Housing Benefits	Ordinary housing benefit Special housing benefit	Entire population Pensioners	67% - Hultin (1997) 85% - Hultin (1997)	1987 to 1992
<i>Canada</i>	Unemployment Benefits	Unemployment Insurance	Unemployed workers	77% - Storer <i>et al.</i> (1995) 73% in 1990, 49% in 1993 – Kuhn (1995)	1981 to 1986 1990 and 1993

18. The second feature of Table 1 concerns the country coverage. Estimates are available for a very limited number of OECD countries, and mainly refer to the United Kingdom and the United States. The United Kingdom seems to be the only country that, since 1997, regularly produces official estimates of take-up rates. These estimates, shown in Table 2, confirm the existence of a significant problem of non-take-up, especially considering that these figures tend to exceed those reported in academic studies.

Table 2. Official take-up estimates, United Kingdom

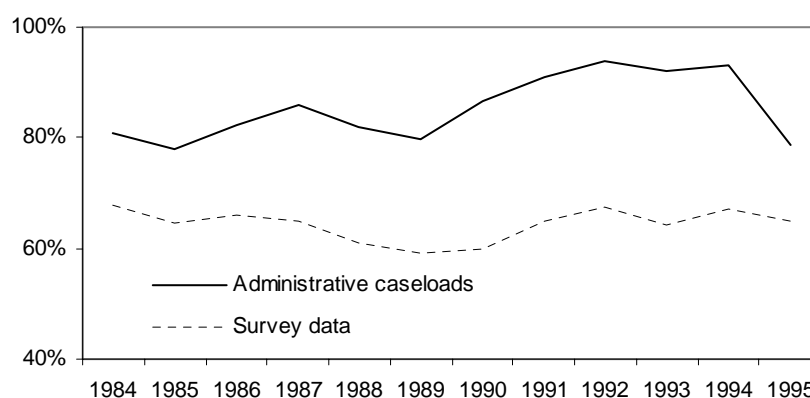
Type of Benefit	Year	Estimated take-up (range)	
		<i>max</i>	<i>min</i>
Income Support	1997/98	90	78
	1999/00	89	79
	2000/01	87	77
Housing Benefit	1997/98	98	91
	1999/00	97	91
	2000/01	95	89
Council Tax Benefit	1997/98	82	76
	1999/00	81	75
	2000/01	80	73
Jobseeker's Allowance	1997/98	74	71
	1999/00	82	68
	2000/01	78	67

Source: DWP, "Income Related Benefits Estimates of Take-up", various years

19. Even less information is generally available about the evolution of take-up rates for welfare benefits over time. Figure 3 shows changes over time in estimates of take-up rates for "Aid to Families with Dependent Children" (AFDC), a welfare benefit offered to families with children in the United States. These estimates are derived from two alternative data sources: administrative records and survey data from the March supplement to the Current Population Survey. As in the case of the United Kingdom, estimates of take-up rates from administrative records systematically exceed those based on survey data. This is probably due to the fact that, even when administrative data are used to compute the number of actual recipients, the total number of eligible people is generally derived from survey data.⁵ As it will be discussed later, the imputation procedures used to identify the eligible population in household surveys are far from perfect, and may underestimate the true number of people who are potentially eligible for a benefit. On the other hand, administrative data are very accurate in recording actual recipients, thus resulting in some of them being counted in the numerator of take-up rates but not in the denominator.⁶ When survey data are used to compute both the numbers of recipients and of eligible people, the numerator and denominator are more comparable but are also both subject to error.

5 This means that administrative take-up rates are in reality a combination of administrative and survey data, with the nominator (the actual number of eligible people) coming from administrative caseloads and the denominator (the total number of potentially eligible people) being imputed from survey data.

6 This is not the case in the United Kingdom, where the DWP uses administrative records to count both recipients and eligible persons (respectively as the numerator and the denominator of take-up rates).

Figure 3. Trends in take-up rates for single-mother families, United States

Note. The continuous line is an estimate of take-up rates based on administrative sources, calculated using AFDC caseloads; the dotted line is a survey estimate of take-up rates based on the March Supplement to the Current Population Survey.

Source: Blank, 1997.

20. Figure 3 also shows that, in contrast to welfare caseloads and benefit participation rates, take-up rates of this particular benefit in the United States tend to fluctuate relatively little over the business cycle. However, the lack of time-series information for other countries and programmes makes it impossible to draw general conclusions from this observation.

Data sources for the estimation of take-up rates and measurement issues

21. Estimates of take-up rates presented above are the result of different computation methods and data sources. These estimates raise a range of measurement issues that limit comparability across countries and programmes.

22. The single most problematic issue is the identification of those people who would receive a welfare benefit if they were to claim it, *i.e.* the eligible non-claimant. Various sources of information can be used to this end. Survey data typically contain questions on actual benefit receipt rather than about eligibility *per se*. This implies that, in most cases, eligibility can only be determined on the basis of imputation procedures based on individual and family characteristics and incomes. Moreover, studies of take-up rates are usually interested in explaining the determinants of participation decisions. This imposes additional data requirements: the amount of the benefit not claimed, the duration of the eligibility for the programme, and the existence of different costs associated with the claim (information, stigma, etc.).

23. Three types of data sources can be used to obtain estimates of take-up rates (Atkinson, 1989). The first is *general-purpose surveys*, such as household budget or income surveys, not specifically designed to this objective. In these surveys respondents are typically asked whether they receive any welfare benefit. However, the data do not generally allow to identify directly the group of eligible individuals who are not receiving welfare. These can only be identified by processing individual socio-economic and demographic variables, available from the survey, through the administrative rules of the specific welfare programme of interest. Imputation procedures are, however, subject to errors. Sometimes the errors are simply related to the complexity of administrative rules governing eligibility. Means-tested benefits generally require the most complex procedures, because of the need of information on both income and assets of different household members, while family/child benefits are often universal and simply subject to age limits (of the children or of the parents). For example, in several Nordic countries,

recipients of minimum income schemes are required to use up all their other resources, such as selling their cars (if not necessary for work), before applying to welfare support. Information of this type is not easily available from general-purpose surveys. Even when all information needed to estimate eligibility is asked for in surveys, responses might be subject to measurement or underreporting error, in particular in the case of assets and of income from capital or self-employment. General-purpose surveys may also not be representative of low-income groups, which are the main object of any analysis of take-up. This could lead to low sample sizes, especially when focusing on population sub-groups such as racial minorities, families with children, and lone parents.⁷

24. The second possible source of information for deriving estimates of take-up rates is *administrative records*. These usually contain much better information on many characteristics of the welfare clients (socio-demographic characteristics of the individuals, amount of the benefits, etc.) but are, by definition, only available for the sample of welfare recipients, thus excluding the eligible non-recipients. Social security administrations, in fact, only keep track of individuals who apply for welfare benefits and not of those who are potentially eligible but never get in contact with the administration. In the best case, administrative data include some information about individuals who applied but were refused benefit (Halpern, 1986; Rouwendal, 2002). Some authors (Blank, 1997) have combined administrative records (on actual participants) and general-purpose survey data (to identify potential recipients) to produce estimates of take-up rates. These estimates may, however, be affected by differences in the sampling and recording procedures of the two sources.

25. The third possible source of information is *surveys specifically designed* to measure and understand take-up of welfare benefits. These surveys clearly represent the ideal solution, but they are costly and they have been rarely done in practice (Atkinson, 1989). One example of specially-designed surveys to assess benefit take-up is the Family Finances Survey (FFS), commissioned by the UK Department of Health and Social Security (DHSS). The FFS over-samples low-income families and asks questions intended to check eligibility of individuals to welfare. Another example of a specially-designed survey is provided by Daponte *et al.*, 1999 (see the annex for a detailed description of this study). However, even this type of data source has shortcomings, as over-sampling makes it difficult to generalise results to the entire population. Advantages and disadvantages of each data source are summarised in Table 3.

7 See, for example, Kim *et al.* (1997).

Table 3. Advantages and disadvantages of various data sources for the estimation of take-up rates

Type of data	Advantages	Disadvantages
<i>General-purpose surveys</i>	<ul style="list-style-type: none"> • Information about both the eligible and the recipients • Richness of information about other individual and household characteristics • Readily available 	<ul style="list-style-type: none"> • Measurement errors of various types (timing of the survey, misreporting of income, etc.) • Small sample sizes for specific subgroups of the population
<i>Administrative records</i>	<ul style="list-style-type: none"> • Accuracy of information about recipients 	<ul style="list-style-type: none"> • No information about the eligible non-recipients • Scarcity of information about other individual and household characteristics
<i>Specifically designed surveys</i>	<ul style="list-style-type: none"> • Information about both the eligible and the recipients • Richness of information about other individual and household characteristics 	<ul style="list-style-type: none"> • Hard to generalize results when the survey is targeted to specific subgroups • Costly and time consuming to produce

26. On top of problems specific to each of these data sources, additional issues arise in the estimation of take-up rates that apply to all of them. Accurate computation of take-up rates usually requires high-quality information on households' income, socio-demographic characteristics as well as on programme participation. The vast majority of datasets used for the estimation of take-up rates are based on *self-reported* information. The general problems related to the use of self-reported information are particularly relevant in studies of take-up behaviour. For example, as eligibility rules of (means-tested) welfare programmes are generally based on an income threshold that separates the eligible from the non-eligible, small errors in the measurement of income around the threshold can lead to large variation in estimated take-up rates. Moreover, discrepancies usually exist between the definition of income used in the survey and the one used by administrative agencies to check benefit eligibility. This is less of a problem with administrative data which, however, need to be complemented with information about the eligible-non-claimants.

27. Another problem relates to the different timing of data collection and of eligibility checks. Often, the reference period of available income data (especially from general-purpose surveys) differs from that over which eligibility is tested by the administration. For example, survey respondents, whose reported income in a given year would not make them eligible for benefits, might still receive them simply because eligibility was evaluated by the administration some time before. In most cases, welfare administrations cannot check eligibility continuously and typically grant benefits for a given period of time.⁸

28. In addition to these accuracy problems associated with income and other personal and family characteristics, misreporting of programme participation may also occur. This is especially relevant when the survey used is not specifically designed to study programme participation. Information about programme participation can be biased for a variety of reasons. Involuntary reasons, such as confusion about the nature of the benefit received, can produce errors in the surveys, especially when the same agency is in charge of different social programmes and pays them jointly. Survey respondents who receive

8 Blundell *et al.* (1988), Koning *et al.* (1997) and Rouwendal (2002) discuss this issue in more detail.

benefits may also voluntarily omit reporting programme participation, because of the stigma that they felt to be associated to the status of benefit recipients.

29. In order to take into account these different sources of bias, empirical studies have adopted a broad range of strategies. In general, most authors widely discuss the accuracy of their estimates of take-up rates. Some of them (Blundell, 1988; Blank, 1997) compare the results from their imputation procedures with other sources (administrative registers, for example) to provide some evidence about the plausibility of their findings. Other authors (Kayser *et al.*, 2000) analyse the sensitivity of their results to measurement errors by computing take-up rates under various scenarios. Finally, in the case of econometric models that explain take-up behaviour, various techniques are used to control for the existence of measurement error (McGarry, 1996). All authors agree in considering measurement error a very serious problem.

Comparability issues

30. The difficulties in producing reliable estimates of take-up rates for welfare benefits, as described above, raise problems of comparability of those estimates along several dimensions: over time, across countries and across programmes. Very few studies compare take-up rates across countries (van Oorshot, 1991) or programmes, although some exceptions exist.⁹ These studies raise a range of comparability problems due to:

- *Changes in programme rules.* Regulations governing access to welfare benefits change frequently, both over time and across regions. If the accuracy of estimates hinges on some of the characteristics of the schemes, then take-up rates computed under different sets of rules might not be fully comparable. For example, a change of eligibility conditions because of one additional requirement will require changes in the imputation procedure, and information about the additional individual characteristic may not be readily available from the data (Blank *et al.*, 1991). Changes in programme rules have been typically used to explain the evolution of take-up rates over time. While these studies have been relatively successful in this respect, the problem of comparing estimates produced under different sets of rules remains.
- *Changes in individual characteristics.* Individual characteristics on the basis of which eligibility is defined also change over time and across regions/countries. If the imputation procedure is particularly weak on these characteristics, then changes in the composition of the population will affect the accuracy of estimates and the degree of comparability. A specific case is that of self-employment. Household income is generally one of the key criteria to determine programme eligibility, and survey data on self-employment income are often unreliable. As a result, estimates of take-up rates across countries, regions and years where the incidence of self-employment is higher will tend to be less reliable.¹⁰ The same limits are likely to hold for other personal characteristics (Blank *et al.*, 1991).

9 See Anderson *et al.* (1997), Blank *et al.* (1991) and McCall (1995) for analyses of variation over time in take-up rates; and Bramely *et al.* (2000) for analyses of variation of take-up rates across sub-national regions.

10 Similarly, comparisons between countries/regions/years with very different shares of self-employment are likely to be driven more by differences in the accuracy of the estimates than in the true underlying take-up rates.

Factors influencing take-up of welfare benefits

31. The generally low estimates of take-up rates for welfare benefits have led numerous authors to put forward and empirically test various explanations. These various factors may be grouped into four main categories: *i*) pecuniary determinants, *ii*) information costs; *iii*) administrative costs; and *iv*) social and psychological costs. This taxonomy is chosen only for descriptive purposes and is by no means exhaustive.¹¹ Some factors could also be classified under more than one category. Evidence from various studies that have tried to quantify the significance of each of these categories is summarised in Table 4. Each of the main determinants of take-up rates is further discussed below. Box 1 further describes how different estimation methods may affect the nature of the empirical results identified in this literature.

32. *Pecuniary determinants* include both the level of benefits and their expected duration. Empirical studies suggest that both are among the most important factors determining participation in welfare programs. Standard cost-benefit reasoning suggests that agents will participate in a programme if the potential gains of claiming the benefits are high enough to offset the costs. The gains from participation in a welfare programme are mainly related to the generosity of the monetary benefit and to the expected duration of the entitlement. The positive correlation between the potential amount of welfare benefits (and its duration) and take-up is probably the single most robust result in the literature.

33. However, this general result holds when personal characteristics of the potential beneficiary, and in particular incomes from other sources, are held constant. This is important, as the propensity to participate depends on the *relative* value of benefits rather than their *absolute* amount: for individuals with relatively high income, receiving the benefit is not likely to make a big difference in welfare terms. Accordingly, low levels of take-up for some benefits might reflect the relatively high income (relative to the benefits offered) of some individuals within the target population. This appears to be the case, for example, of unemployment insurance, which is generally only taken up by workers with low incomes and long expected spells of unemployment, even when high-income workers are usually entitled to higher benefits (McCall, 1995).

34. The tax system also plays a crucial role in determining the effective (take-home) value of welfare benefits. As stressed by Ashenfelter (1983) and Anderson *et al.* (1997), changes in tax policies may affect take-up of welfare programmes through modifications in the effective amounts of benefits. This is important as often, in designing changes of the tax system, little attention is paid to their side effects on other elements of the welfare system.

35. The second main category of determinants of take-up rates listed in Table 4 is that of *information costs*. Information costs refer to the difficulty or complexity of the steps required to participate in welfare programmes. Gathering, understanding and mastering application procedures imply costs in terms of time and effort, which may induce agents to renounce if their expected gain is low, or if the procedure is too complex and disorganised. In empirical investigations, information costs are often proxied with some indication of the area of residence. For example, Warlick (1982) finds that residents in small cities are, other things being equal, less likely to take-up welfare benefits – a result that is interpreted as evidence that residing far away from administrative facilities increases the costs of applying.

11 Other classifications have been proposed by Craig (1991) and van Oorshot (1991).

Table 4. The main determinants of take-up of welfare benefits

Determinants	Effect on take-up	Nature of the effect	Programme type	Country	Studies
1. Pecuniary determinants					
<ul style="list-style-type: none"> ▪ Expected amount of the benefit 	Positive	As the importance of benefits in increasing individuals' welfare depends of their income, people with higher income are less likely to take-up benefits. Because the value of benefits depends on taxes levied on them, tax reforms may have undesired effects on take-up rates.	<ul style="list-style-type: none"> • Unemployment benefits • Social assistance 	<ul style="list-style-type: none"> • United States 	<ul style="list-style-type: none"> • McCall, 1995 • Ashenfelter, 1983 • Anderson <i>et al.</i> 1997
<ul style="list-style-type: none"> ▪ Expected duration of the benefit 	Positive				
2. Information costs					
<ul style="list-style-type: none"> ▪ Information about programme's existence and application procedures ▪ Receipt of other benefits 	Positive	Residents in small cities and in rural areas are, other things equal, less likely to take-up benefits.	<ul style="list-style-type: none"> • Social assistance • Housing benefits 	<ul style="list-style-type: none"> • United Kingdom (Scotland) • United States • United Kingdom • United States 	<ul style="list-style-type: none"> • Warlick, 1982 • Bramley <i>et al.</i>, 2000 • Daponte <i>et al.</i>, 1999 • Coe, 1979 • Dorsett <i>et al.</i>, 1991 • Zedlewski <i>et al.</i>, 1999
3. Costs due to delays in the administrative process and uncertainty of outcomes					
<ul style="list-style-type: none"> ▪ Administrative delays 	Negative	When processing the application takes time, those with low expected duration of entitlement may not apply	<ul style="list-style-type: none"> • Unemployment benefits 	<ul style="list-style-type: none"> • Canada 	<ul style="list-style-type: none"> • Storer <i>et al.</i>, 1995
<ul style="list-style-type: none"> ▪ Uncertainty about the outcome of application 	Negative	When the outcome of the application is uncertain the expected benefit decrease and take-up is lower	<ul style="list-style-type: none"> • Disability benefits 	<ul style="list-style-type: none"> • United States 	<ul style="list-style-type: none"> • Halpern <i>et al.</i>, 1986
4. Social and psychological costs					
<ul style="list-style-type: none"> Stigma 	Negative	Benefits targeted to specific subgroups typically show lower take-up rates. Similarly, people who are more socially active are less likely to take-up welfare benefits. Both effects are thought to be due to stigmatisation.	<ul style="list-style-type: none"> • Social assistance • Family benefits 	<ul style="list-style-type: none"> • Germany • United States 	<ul style="list-style-type: none"> • Moffit, 1983 • Daponte <i>et al.</i>, 1999 • Kayser <i>et al.</i>, 2000

36. A similar finding is documented in Bramley *et al.* (2000). More direct evidence on the importance of information costs for take-up decisions is provided by Daponte *et al.* (1999). The authors selected a sample of people who appeared to be eligible to the US Food Stamps Program, but decided not to apply for it. At the interview they were informed about their eligibility status. Few months later, the same individuals were re-interviewed to check whether they had applied for benefits and, if not, they were asked to indicate the reasons of their behaviour. As it turned out, after having visited these families and informed them about their eligibility and the administrative steps they needed to undertake to receive the benefit, a very large fraction of these families did apply for benefits in the following weeks.

37. Evidence about the importance of information costs is also provided by other studies. Coe (1979) makes use of a question asked to families who appeared to be eligible for food stamps in the US in 1979 but did not receive the benefit. Most respondents simply said they were not aware of their being eligible. Dorsett *et al.* (1991) and Zedlewski *et al.* (1993) both report that receiving one type of welfare benefit increases the likelihood of receiving another one, and attribute this to economies of scale in acquiring information and becoming acquainted with the bureaucracy of the application process. Zedlewski *et al.* (1993) also provide evidence that, in the case of many social programmes in the United States, the administration responsible for one benefit automatically submits the application for other programmes on behalf of its clients, or simply informs them about other possibilities to get welfare assistance. Indirect evidence about the importance of information costs is also provided by the finding that individuals who receive more than one welfare benefits typically leave all of them simultaneously, even when they are still eligible for some. Interactions between different programmes, however, can also generate misperceptions about the regulations. For example, evidence in DWP (1998) suggests that some beneficiaries of housing benefits in the United Kingdom, who were also eligible for minimum income, did not apply to the latter benefit because they believed the two schemes were incompatible.

38. The third category listed in Table 4 refers to the *costs associated to the delays in the administrative process and to the uncertainty about the outcome of the application*. It usually takes time between the moment a person becomes eligible for a welfare programme and when he or she effectively enrolls in it. This delay will reflect the time required by the eligible individual to gather information about the programme's rules, the period necessary to submit an application and the time required by the administration to process it. In some cases, mandatory latency periods (between the moments in which the application is approved, and that when the first benefit payment is made) may also exist. These process costs may therefore induce agents not to participate to a programme if the expected eligibility spell is perceived as being too short. In particular, this is likely to occur in the case of unemployment insurance programmes: workers who expect to find a new job relatively quickly may not find it convenient to go through the hassle of the application procedures, especially when (as in most OECD countries) unemployment benefits are subject to some strict checks on the availability to work and to take up suitable job offers. Storer *et al.* (1995) report that less than half of the eligible unemployed in Canada claimed their benefits in the first month of unemployment during the period 1981-86.

39. Uncertainty related to the application process may also lead to process costs. If eligible people decide whether to file a claim on the basis of their *expected* income under alternative choices, then a higher probability that their welfare application will be accepted will lead to higher take-up. Halpern *et al.* (1986) develop and estimate a structural model of participation under uncertainty.¹² Their empirical results indicate that, when the probability of successful application (typically computed as the ratio between submitted applications and successful awards) is low, eligible agents are less likely to apply. Moreover, DWP (1998) also suggests that some claimants were afraid that, if they made a successful claim but then a mistake were to be discovered, they would have to repay some money they had already spent.

12 The role of uncertainty has been analysed in many studies that look at the labour supply decisions of welfare recipients. See, for an example, Kreider (1998).

40. The last category in Table 4 refers to *cultural attitudes and social stigma*. These costs have received close scrutiny in the sociological literature. More recently, economic models have also tried to offer a theoretical framework to analyse them empirically.¹³ In these models, the decision to participate in a welfare programme is seen as providing a negative signal that is likely to stigmatise individuals for both sociological and cultural reasons. The degree of stigmatisation generated by a welfare programme will obviously depend on its rules, and certain schemes are likely to be less stigmatising than others (*e.g.*, unemployment insurance *versus* minimum income programmes). For example, the US Food Stamps Program¹⁴ has often been perceived as being particularly subject to such effects, simply because recipients may feel stigmatised every time they go to a shop and use the stamps. Greater targeting of a welfare benefit to specific groups may make these groups particularly exposed to stigmatisation by the rest of society. A recent study (Engels *et al.*, 2000), for example, finds that non-take-up of social assistance benefits in Germany is particularly high among pensioners, and relates this finding to the common tendency among the elderly to see governmental aid as degrading. At the administration level, the behaviour of welfare officials towards claimants may also be perceived as humiliating or stigmatising. This is particularly likely when an administration acts both as a welfare provider and as fraud controller.

41. Despite its vague definition, the existence of stigma has received considerable attention in the literature, and is considered as one of the main determinants of the observed low levels of take-up for most welfare benefits. Moffit (1983), who models the decision of applying for welfare in the presence of stigma, tries to assess whether stigma is a fixed psychological cost or it varies with the amount of the benefit. Evidence from experimental data suggests that only the fixed component of stigma is relevant. For example, Kayser *et al.* (2000) use information about social attitudes to test the existence of stigma. Their results indicate that individuals less attached to social groups, and more pessimistic about life, are more likely to take-up their benefits. However, Daponte *et al.* (1999) finds no evidence of stigma and suggests that effects usually attributed to stigma may simply reflect lack of information.

42. All types of costs identified in Table 4 as influencing the decision of individuals to take-up benefits are crucially affected by the administrative rules. These vary greatly across programmes and countries. For example, means-tested benefits usually impose the heavier administrative burden on both applicants (they typically need to provide detailed information about incomes, assets and family characteristics) and welfare officials (complex evaluation of applications, frequent eligibility checks, etc.). At the other extreme, child/family benefits are in many countries quasi-universal (they are paid to all families with a certain number of members and/or to families with children below a certain age, regardless of their income). Both submitting and processing applications for these benefits is rather simple and the timing of eligibility checks is quasi-automatic (*e.g.* when children are supposed to reach the maximum age of entitlement). The degree of stigmatisation associated to a welfare programme is also related to its administrative rules. Programmes that require recipients to continuously identify themselves may generate more stigma than those that only require a one-off application and then transfer money directly to the recipients. Programmes that are targeted to a specific sub-group of the population tend also to generate more stigmatisation than universal ones.

43. Recognising the importance of these administrative rules is especially important to dispel the notion that non-claimants themselves are solely responsible for low levels of take-up. The behaviour of the eligible non-claimant is affected by the complexity of the administrative procedure and by the treatment

13 As noted by Moffit (1983): "The stigma has been amply documented in the sociological literature where interviews of recipients have often uncovered feelings of lack of self-respect and negative self-characterisations from participation in welfare. Nevertheless, this phenomenon has not been modelled, and many questions consequently remain."

14 The food stamps program offers vouchers that can be spent on food only. It is substantially equivalent to a minimum income scheme with restrictions on the use of money that comes from welfare.

received at the hands of the officers.¹⁵ Moreover, Queralt *et al.* (2002) suggest that the supply of welfare benefits can also sometimes be problematic. US evidence on private provision of child-care services, in the presence of government subsidies to families that use such services, suggests that low levels of take-up are sometimes caused by rationing from suppliers, *i.e.* low levels of service rates rather than take-up. These considerations about administrative rules also highlight the potential for policies aimed at improving take-up of welfare benefits: rather minor interventions aimed at simplifying the application process, improving the efficiency of the bureaucracy and/or reducing the perception of stigmatisation, are likely to have tangible effects on participation.

Policies to increase take-up rates

44. The problem of non-take-up of welfare benefits has attracted relatively little attention in both academic research and policy analysis. The paucity of research on this issue stands in contrast with the evidence, reviewed in this paper, that a significant share of people who could successfully claim welfare benefits do not apply for and receive them.

45. The studies reviewed above suggest a number of policy interventions that could potentially improve the level of take-up of welfare benefits. First, as administration and information barriers are often the most important factors deterring eligible individuals from applying for welfare benefits, a few simple measures could be beneficial. For example, a general simplification of the procedures necessary for applying is likely to improve the level of take-up in many countries and for many programmes. Zedlewski *et al.* (1993) suggest, for example, that significant increases in take-up levels could be obtained by having social workers, or any other official person who is already in contact with the potential beneficiary for other reasons (even the fiscal administration), assisting prospective beneficiaries in filling application forms. Also, the screening of the applications should be transparent and objective, in order to reduce the uncertainty involved in claiming welfare assistance (Halpern *et al.*, 1986). Last, advertisement campaigns aimed at informing potential beneficiaries about the existence of welfare benefits that respond to their needs, as well as about the procedures for applying, could also improve take-up levels. A significant experience in this direction is the “Outreach Programme”, which was introduced in Canada in 2000 with encouraging results.

46. Second, this review also suggests the existence of significant interactions both among different welfare programmes, and between the welfare and the tax system. Receiving one benefit typically makes it more likely that the same person will also apply for other programmes. Careful design of the rules and regulations regarding eligibility for multiple programmes could both increase information and take-up among eligible individuals, and reduce fraudulent behaviour by the non-eligible. For example, one-stop shops introduced in several OECD countries – where individuals who apply for one benefit are automatically informed about other programmes they could be eligible for – could significantly increase take-up rates. Especially in times of reforms, the effect of the tax system on the incentives to take-up welfare should also be carefully considered.

15 As argued by van Oorshot (1991): “Clearly non take-up cannot be explained solely in terms of the motives, intentions and decisions of the non-claimants themselves. Policy-makers and administrators can often be held responsible too.”

Box 1 How are these results obtained? Econometric models of take-up

Most empirical studies of benefit take-up use micro-level data in order to identify the role of each factor. Micro-studies make use of the variation in individual characteristics to evaluate their impact on take-up decisions. Within this approach, a Probit model for taking-up the benefit is usually estimated on the sample of all eligible people, with individual characteristics introduced as determinants to explain participation. The amount of the actual (for the recipients) or potential (for the eligible non-recipients) benefit is normally included as an explanatory variable in these models together with a set of individual characteristics. Often these variables are meant to proxy factors such as transport costs (area of residence), information costs (age and education) and stigma. As costs and benefits of programme participation vary with individual characteristics (family size and composition, age), this procedure allows drawing inferences through comparisons of take-up of one programme across people with different characteristics.

The robustness of estimates is, in some cases, increased by efforts to control for the presence of measurement error, both in programme participation and in the explanatory variables. For example, Duclos (1997) and Terracol (2002) model the fact that, as agents' primary income is measured with errors, theoretical benefit entitlements are also subject to errors, and programme participation is not always reported in the survey. To control for these measurement errors, the participation decision of individuals is jointly modelled with equations for the decision of reporting participation, and for assessing the impact of measurement errors of the potential benefit of the programme.

Micro studies of this type have been subject to several critiques. First, effects estimated using cross-sectional variation do not account for unobserved heterogeneity of individuals. As a result, effects are likely to be individual-specific and estimates will be biased if the explanatory variables do not capture the full heterogeneity of agents in the sample. Second, when individual characteristics are used as proxies for some unobservable costs (or benefits) of welfare participation (for example, when the education level of the applicant is used as a proxy for the cost of obtaining information about welfare programmes), estimates will be affected when these characteristics also affect participation through other channels (in the example given, when education is also correlated with income or stigma). Thus, drawing conclusions about the effects of unobservable factors on take-up behaviour through proxies is not satisfactory, and more accurate information about the characteristics of the programme or of participants is necessary to avoid these problems. Kayser *et al.* (2000), to avoid these problems, rely on questions on social attitudes in the German GSOEP to derive more meaningful proxies of stigmatisation. Their results indicate that individuals who are less attached to social groups are less affected by stigma and participate more in welfare assistance; the same holds true for people who are more pessimistic about life and feel powerless with respect to their own future.

Another potential source of bias concerns the effects of policy changes on the sample of all the eligible people. Estimating a Probit model for take-up on the sample of all eligible people implies that results cannot be extended to the entire population. In other words, the effects of changes in a programme's parameters (e.g. the amount of the benefit) estimated by these models indicate how participation would be affected holding eligibility fixed; however, when a programme's parameters change, some agents might modify their behaviour in order to become eligible even if they eventually end up not participating. To avoid this problem, some studies have tried to estimate the effects of programme features using an experimental approach (e.g., Daponte *et al.*, 1998). In the absence of these random experiments, other authors have tried to draw inference from natural experiments (*i.e.* exogenous variation over time, or across groups, in programme rules). Anderson and Meyer (1997), for instance, analyze how take-up rates for unemployment insurance evolved after benefits became subject to taxation.

An alternative to reduced-form models are structural models of welfare participation (see, for example, Halpern *et al.*, 1986; and Koning *et al.*, 1997). These models have the advantage of providing a clear interpretation of the estimated parameters, which correspond directly to the parameters described in the theoretical model. However, they also need to assume that the underlying theoretical models are correct and complete, and this is often a very strong assumption.

A recent original contribution to research on benefit take-up is provided by Pudeny *et al.* (2003), who produces estimates of a monetary equivalent of the entire set of pecuniary and non-pecuniary costs related to the application process to a welfare programme. The fact that some eligible people do not apply for welfare, and that the probability of applying is positively affected by the amount of the benefit, leads the authors to think that both pecuniary and non-pecuniary costs can be estimated and converted into a monetary equivalent. This approach is applied to the case of pensioners eligible for income support (a standard minimum income programme in the United Kingdom) and assume that all eligible non-claimants face application costs that are higher than expected benefits.

47. Third, and probably most important, better empirical evidence and research is required to inform policy makers of the measures that will be more effective in reducing the extent of non-take-up. The availability of good quality micro data is probably the most effective way to foster research in this area and production of accurate estimates of take-up rates. To this end, two main actions seem to be advisable:

- First, production of official estimates of take-up rates for various benefits, on the basis of the comparable data and procedures, should be encouraged. This would allow monitoring the evolution of take-up rates over time and across benefits. These estimates should be based on information from both administrative data (which must already exist with the institutions that administer welfare benefits in each country) and general-purpose surveys, and rely on a standardised imputation procedure. In countries where survey data do not exist, or lack the type of questions needed to identify the eligible-non-claimant, actions should be taken in order to design new surveys or to extend existing ones. Case studies of typical individuals at the margin between take-up and non-take-up would also be useful. Data should be widely disseminated, so as to encourage academic research of the determinants of the observed trends in official statistics of take-up.
- Second, greater use of ad hoc surveys could significantly improve understanding of the determinants of the behaviour of eligible people, and of the policies most effective in increasing take-up rates. While these surveys are often costly and cannot be produced frequently, information on all the eligible people could be collected at regular intervals (*e.g.*, 5 years) with specific questions about their claiming behaviour. Daponte *et al.* (1999) provide a good example of what can be learned from such surveys.

Table 5 describes the range of policy measures that countries could introduce to increase take-up rates of welfare benefits.

Table 5. Suggested policy measures to increase take-up rates

<i>Review and simplify administration rules</i>	
	<ol style="list-style-type: none"> 1. Simplify application procedures 2. Make access rules transparent and objective, in order to reduce the uncertainty related to the claiming process. 3. Put in place advertisement campaigns to inform potential beneficiaries about the existence of welfare programmes that respond to their needs and about the application procedures.
<i>Improve the interactions with other elements of the welfare state</i>	
	<ol style="list-style-type: none"> 1. Make greater use of one-stop shops to avoid fraud and better inform potential beneficiaries (to improve interactions between various welfare benefits). 2. Consider carefully the effects of tax reforms on individuals' incentives to take up welfare benefits (to improve synergies with the tax system).
<i>Strengthen empirical evidence and research</i>	
	<ol style="list-style-type: none"> 1. Produce regular estimates of take-up rates for various programmes, based on the same data and standardized procedures. 2. Make administrative data more readily available to the research community. 3. Conduct ad-hoc surveys at regular intervals (<i>e.g.</i>, every 5 years).

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ANNEX. STUDIES OF TAKE-UP OF WELFARE BENEFITS IN OECD COUNTRIES: A REFERENCE SECTION

48. This Annex discusses and summarises the most relevant papers that have been reviewed for this report. The choice of articles has been guided by two main criteria. First, a relevance criterion: although far from comprehensive, this list includes those studies that appear to be the most influential and most cited in the literature. Second, an effort has been made to extend the coverage of this review to as many countries and programmes as possible. Unfortunately, as stressed by van Oorshot (1991), studies of take-up of welfare benefits only exist for a very limited set of countries. This limitation is reflected in the selection of papers presented below.

49. The papers are organised below in 6 sections and, within each section, ordered by year of publication. The first four sections group papers dealing with four main types of welfare benefits (social assistance, housing, child and family benefits, and unemployment benefits). The fifth section reviews theoretical studies that do not attempt to bring their behavioural models to the data (*e.g.*, Creedy, 2002), and which provide general frameworks that can be applied to several welfare programmes. The last section includes literature reviews (*e.g.*, van Oorshot, 1991) that are written in the same spirit of this report. For those specific articles investigating more than one benefit (*e.g.*, Blank and Ruggles, 1996) it has been necessary to make a somehow arbitrary choice in their classification, and they have been included in the section corresponding to the benefit they discuss more accurately.

I. Social Assistance

R. Coe (1979), "Participation in the Food Stamp Program, 1979.", G. J. Duncan and J. N. Morgan (eds.), *Five Thousand American Families: Patterns of Economic Progress*, vol.10, Ann Arbor, University of Michigan.

Country: United States

Time period: 1976 and 1979

Estimated take-up: 41.3 % (1976) – 46.1% (1979)

This article describes evidence on participation in the Food Stamp Program as it emerges from the 13th wave of the Panel Study of Income Dynamics (PSID). In 1976 and 1979 a set of questions on participation in welfare programmes was included in the standard PSID questionnaire. Eligibility is imputed on the basis of income and asset information collected in the survey. Results indicate that only 41.3% of eligible families participated in the programme in 1976, this proportion increasing to 46.1% in 1979. Individuals who indicated that they did not to receive food stamps were asked the reason why they did not apply or were rejected. The most frequent answer suggests that informational barriers are especially important. Most of the eligible-non-participant households think they were not eligible to the programme. Variation in perceived eligibility also explains much of the variation in participation rates across subgroups of the population.

J. L. Warlick (1982), "Participation of the Aged in SSI", *Journal of Human Resources*, 17(2), 236-260.

Country: United States

Time period: 1974-1975

Take-up rate: 53%

The Supplemental Security Income (SSI) programme offers cash assistance to the aged, blind and disabled in the United States. Although this programme is often the sole escape route from poverty available to these groups, take-up rates of the programme appear to be surprisingly low, with various estimates indicating that only around half of eligible individuals receive benefits. Using individual data from the March 1975 Current Population Survey, this paper investigates the possible determinants of decisions of not participation to this programme. Eligibility is estimated on the basis of information about household composition and income sources, and various problems affecting the accuracy of this imputation are discussed. A Probit model for participation of the eligible population, which includes as explanatory variables the individuals' potential benefit and a set of socio-demographic characteristics, is used to explore the determinants of individual take-up decisions. Results indicate that the amount of available benefits is positively related with participation in the programme. However, low expected benefits do not explain all non take-up: around 20 %, of the poorest individuals, with high expected benefits, do not participate in the programme. The model suggests that much variation in take-up decision is explained by other socio demographic characteristics. In particular, more educated people (among whom stigma is likely to be especially important) and older people (for whom application difficulties are likely to be a greater obstacle) are less likely to participate. Residence in small cities also leads to lower participation, suggesting that administrative costs might be related to distance from public facilities.

O. Ashenfelter (1983), "Determining participation in Income-Tested Social Programs", *Journal of the American Statistical Association*, vol. 78, 517-525.

Country: United States

Time Period: 1978

This paper, which has pioneered research on welfare programme participation, develops a statistical framework to analyze whether estimates of the number of participants in income-tested social programmes based only information on incomes are appropriate for policy purposes. The paper analyses the simplest possible means-tested programme, in which agents receive a benefit if their income falls below a certain threshold. Information on individual incomes, which allows identifying the number of individuals/families who fall below the cut off point, provides a simple estimate of the number of participants. However, using this estimate to predict the effect of changes in the programme parameters (*e.g.*, income threshold) on the pool of beneficiaries is misleading for two main reasons. First, incentive effects created by the programme may lead some individuals to reduce their labour supply to make themselves eligible, with the marginal tax rate of the programme affecting the intensity of these incentive effects. Second, some potential participants may not participate in the programme due to various types of non-pecuniary costs (information, stigma, etc.). In order to explore these issues, the author uses information from the Seattle and Denver Income Maintenance Experiments (SIME/DIME), a programme experiment that offered different combinations of benefits and eligibility thresholds to randomly selected samples of individuals. This design allows comparing similar individuals subject to different programme parameters. Results indicate that the main determinant of participation in this type of programme is its generosity (*i.e.* the amount of benefit and the cut off level). Labour supply effects are found to be significant, while tax effects, stigma, and other non-pecuniary costs do not appear to be statistically significant.

J. Halpern, J. A. Hausman (1986), “Choice under uncertainty: a model of applications for the social security disability insurance program”, *Journal of Public Economics*, vol. 31, 131-161.

Country: United States

Time Period: 1972

This paper argues that fluctuations in the number of recipients of disability insurance (DI) in the United States between the 60s and the 80s are mainly due to changes in the “denial rate”, *i.e.* the number of applications that are rejected. Rejections are frequent in the DI programme because of strict work and income requirements. The authors explore the idea that uncertainty about the outcome of the application process affects the decision of applying through a structural model of participation, in which agents decide whether to apply for DI by comparing the uncertain expected income if applying with the certain income if not applying. The estimation of the model on data from the 1972 Survey of Disabled and Non-Disabled Adults (SDNA) suggests that uncertainty plays a significant role in discouraging participation, *i.e.* when the outcome of the application is more uncertain, less potentially eligible people claim their benefits. However, this effect is small relatively to other factors (magnitude of the expected benefit, degree of disability, etc.).

V. Fry, G. Stark (1989), “The Take-Up of Supplementary Benefit: Gaps in the ‘Safety Net’?”, Dilnot A. and I. Walker, *The Economics of Social Security*, Oxford University Press.

Country: United Kingdom

Time Period: 1984

Estimated Take-up: 81.5% for non-pensioners, 86.5% for pensioners

The authors first produce estimates of take-up rates for the Supplementary Benefit (SB) and then analyse the determinants of non-take-up. Supplementary Benefit was introduced in the United Kingdom in 1966 to replace a similar programme called National Assistance (NA). SB was in turn replaced by Income Support (IS) in 1988. These changes involved only modifications in the administration of the benefit and in interactions with other welfare programmes, while retaining as underlying goal that of providing a “safety net” that offers financial support to individuals whose income from any other source falls below a certain threshold. Estimates of take-up rates, based on an imputation procedure applied to the 1984 Family Expenditure Survey, indicate a higher level of take-up (81.5% for non-pensioners and 86.5% for pensioners) relative to official figures from the HM Treasury (about 71%). Estimates of take-up rates for various population groups (while affected by small sample sizes) indicate that the single most important factor of decisions to apply for benefit is the level of entitlement (individuals entitled to small amounts are less likely to take-up their benefits).

S. R. Zedlewski, S. Brauner (1993), “Declines in food-stamps and Welfare participation: is there a connection?”, *Assessing the New Federalism*, Discussion Paper, 1999-13. Urban Institute, Washington D.C.

Country: United States

Time period: 1996-1999

This paper uses data from the 1997 National Survey of American Families (NSAF) to examine interactions between the Food Stamp Programme (FSP) and welfare assistance (in the form of Aid to Families with Dependent Children, AFDC, or Temporary Assistance to Needy Families, TANF). Many families typically receive both FSP and welfare assistance at the same time. Families that leave welfare very often also leave the FSP at the same time, even if the income threshold above which FSP is withdrawn is higher than that for welfare assistance. The authors suggest that of administrative assistance

offered to welfare recipients is the key to explain this phenomenon: welfare officers usually make sure that families with cash assistance enrol for FS too, while these families would have to personally apply for these benefits when they are not on welfare. This makes numerous families eligible for FS not apply for the benefit.

K. McGarry (1996), “Factors Determining Participation of the Elderly in Supplemental Security Income”, *Journal of Human Resources*, 31(2), 331-358.

Country: United States
Time period: 1984
Estimated Take-up: 56%

This paper tries to explain low take-up rates of the Supplemental Security Income (SSI), a programme offering cash assistance to the aged, blind and disabled in the United States. The paper focuses on the aged only. The author uses data from the 1984 Survey of Income and Program Participation (SIPP) to impute eligibility to SSI. The panel structure of this dataset (where respondents are interviewed monthly for up to 18 months), and the detailed information on asset holdings that it contains, make this survey especially suited for this purpose. The imputation procedure indicates that only 56% of eligible individuals receive SSI. Results from a Probit model for participation on the sample of eligible individual, which tries to control for measurement error in the expected benefit, indicate that larger benefits from the programme increase the probability that an individual will participate, and that this effect is substantially increased when measurement errors are controlled for (with a 25% increase in potential benefits leading to an increase of around 6% in the probability of participation). Take-up rates do not appear to be significantly affected by participation such as transport and information.

B. O. Daponte, S. Sanders, L. Taylor (1999), “Why do Low-Income Households not Use Food Stamps? Evidence from an Experiment”, *The Journal of Human Resources*, vol.34(3), 612-628.

Country: United States
Time period: 1993
Estimated take-up: 75%

The empirical strategy used in this paper relies on data collected by the authors on a sample of 405 low-income households in Pennsylvania in 1993. These households were first interviewed in the summer 1993, with information collected about their incomes and assets, and about participation in the Food Stamp Program (FS): these data indicate that take-up of FS benefits among eligible families was 49%. When non participant families (both eligible and non-eligible) were interviewed and asked the same set of questions used by the administration to verify eligibility to FS, take-up is estimated at 75%. The reasons for this discrepancy lay in the scarcity of information about assets, cash, car property and other minor wealth items that, while not collected in standard surveys, are critical for assessing eligibility. This result casts doubts on the accuracy of take-up estimates produced in the literature. Households identified as being eligible, even after this more accurate check, were asked why they did not apply for the programme. Many of them indicated that they thought they were not eligible, with little correlation between perceived and actual eligibility. This suggests that studies that have relied on self reported eligibility might have reached misleading results. Households were interviewed a third time 8 months after the eligibility test and informed about the outcome of the test, to check whether they had actually applied to the programme. A large fraction of them had indeed done so, indicating the important effect of information on participation in welfare programmes. Households who were eligible and did not apply indicated as main reason for not participate that benefits were not high enough, rather than stigma effects.

H. Kayser, R. Frick (2000), “Take it or leave it: (Non-)Take-up behaviour of Social Assistance in Germany”, DIW Discussion Paper 210.

Country: Germany

Time Period: 1996

Estimated Take-up: 37.1%

This paper presents empirical estimates of take-up rates for Social Assistance (*Hilfe zum Lebensunterhalt*) in Germany using the German Socio-Economic Panel (GSOEP). Eligibility is imputed on the basis of information on region of residence, individual income and family characteristics. Rather than accepting the inevitable measurement error in the imputation procedure, the authors compute replacement rates under different assumptions about the size of the error. Their results suggest that estimated take-up rates are extremely sensitive to errors in imputing eligibility (a 10% error in both directions (more- and less-eligible) leads to replacement rates that vary from 26% to 48%). Under the authors' baseline scenario, take-up rates are estimated at 37.1%. A Probit analysis on the sample of eligible people for the probability of take-up, which include a set of individual controls, suggests that take-up increases with benefit amounts. Questions about social attitudes of respondents, like participation in religious and other groups, subjective views about the future, and feelings about one's course of life, are used to evaluate the importance of stigma effects. Results indicate that individuals who are less attached to social groups are less affected by stigma and participate more in welfare assistance. The same holds for people who are more pessimistic about life and feel powerless with respect to their own future.

M. Matsaganis, F. Papadopoulos, P. Tsakoglou (2001), “Estimating Extreme Poverty in Greece and the Cost of Eliminating It through a Minimum Guaranteed Income Scheme”, *Journal of Income Distribution*, vol. 10 (1-2), 40-57.

Country: Greece

This paper, while not providing direct evidence of take-up rates and its determinants, it documents the importance of take-up rates for evaluating the impact of policy changes on poverty rates and for forecasting the financial costs of social assistance programmes. Greece (together with Italy) is the only EU country where a minimum income scheme does not exist. The paper evaluates the potential impact of such a programme on poverty rates and its financial costs, under various assumptions on take-up rates (from 100% to 70%) and income under- or non-reporting, based on information from the second wave of the European Community Household Panel (ECHP) to impute eligibility to a very standard minimum income scheme. Their baseline scenario, assuming full take-up, no effects on labour supply, no income underreporting and an income threshold equal to the 2000 social pension, indicate that 6.7% of all Greek households would receive some benefit, with a public expenditure of around 0.23% of GDP. By varying the extent of non-take-up and income underreporting, participation could increase to 8.6% of Greek households and with expenditure at 0.28% of GDP. Considering that take-up of social assistance is often estimated to be lower than 50%, these results highlight the importance of accurate knowledge of take-up behaviour in order to forecast the impact of policy changes on public expenditure as well as poverty and inequality measures.

R. T. Riphahn (2001), “Rational Poverty or poor rationality? The take-up of social assistance benefits”, *Review of Income and Wealth*, vol. 47(3), 379-398.

Country: Germany

Time Period: 1993

Estimated Take-up: 37.4%

This paper analyses non-take-up of social assistance (a minimum income programme paid to all families whose income falls below a household-specific income threshold) in Germany. Properties and wealth are also considered to establish eligibility. This paper relies on data from the 1993 EVS (Income and Expenditure Survey) to impute eligibility on the basis of detailed information about income and wealth and interactions with other benefits (education, temporary social assistance). Around 63% of all households eligible to basic social assistance (*Hilfe zum Lebensunterhalt*) appear not to receive these benefits. Results from a Probit model for take-up run applied on the entire sample of eligible households indicate that higher expected benefits increase take-up. Evidence on various proxies for the duration of the benefit, stigma and administrative costs is mixed.

S. Pudney, M. Hernandez, R. Hancock (mimeo), “The Welfare Cost of Means-Testing: Pensioner Participation in Income Support”, University of Leicester.

Country: United Kingdom
Time Period: 1997-2000
Estimated Take-up: 64.6%-65.7%

Although focusing on pensioners, a population subgroups for which labour supply consideration are less important, this paper makes an important contribution to the wider literature about take-up of welfare benefits. Because some people do not apply for welfare even if entitled, and the positive association between the probability of applying and the amount of the benefit, leads the authors to argue that the costs of applying, being them pecuniary or non pecuniary, can be estimated and converted into a monetary equivalent. They do this for the case of pensioners who are eligible for income support (a rather standard minimum income programme), assuming that all the eligible non-claimant people must face application costs that are higher than the expected benefits. Using a model based on revealed preferences, the authors estimate an application cost of approximately 2-3 GBP per week for the average benefit recipient.

A. Terracol (mimeo), “Analyzing the take-up of means-tested benefits in France”, Université Paris 1 – Panthéon - Sorbonne.

Country: France
Time period: 1994-1995-1996
Estimated Take-up: 52% (raw data) and 65% (alternative strategy)

This paper focuses on take-up for two French means-tested benefits (the *Revenu Minimum d'Insertion*, RMI, and the *Allocation de Parent Isolé*, API) based on data from the first three waves of the European Community Household Panel (ECHP). The author imputes the theoretical eligibility for each household and calculates the benefit level to which they are entitled. A comparison between calculated eligibility versus reported programme participation suggests a rate of non-take-up of 48% for both benefits. The author underscores the existence of two major measurement errors likely to affect the robustness of the results, *i.e.* under-reporting in programme participation and measurement error in household income. To avoid the estimation bias due to these measurement errors, an alternative strategy, (in the spirit of Duclos, 1995) is developed. This strategy suggests a mean non-take-up rate of 35%, which is smaller than the one computed previously.

2. Housing Benefits

R. Blundell, V. Fry, I. Walker (1988), “Modelling the Take-up of Means-Tested Benefits: The Case of Housing Benefits in the United Kingdom”, *Economic Journal*, vol. 98(390), 58-74, Supplement: Conference Papers.

Country: United Kingdom

Time period: 1984

Estimated Take-up: 60%

This paper It makes use of the 1984 Family Expenditure Survey (FES) to compute take-up rates of housing benefits in the United Kingdom. Housing benefits in the UK are offered to all individuals whose income falls below a certain threshold and are calculated on the basis of a “normal” cost of accommodation. An imputation procedure, developed at the Institute for Fiscal Studies, allows to identify the eligible population and to compute take-up rates. The authors note that this imputation is potentially exposed to a set of problems. First, as survey income refer to the current year, while eligibility is checked every 6 months, some households may appear to be non-eligible in the survey but receive the benefit simply because the benefit was granted on the basis of income tests carried out 6 months earlier. Second, there may be differences in the definition of households and tax units (*i.e.* more than one tax unit coexist in the same household, for example parents and sons). Third, FES tends to provide poor data for some income sources such as self-employment income. Fourth, some households can be entitled to both housing and supplementary benefits (a minimum income scheme implemented in the UK at that time). Despite these potential errors, a comparison of imputed and actual benefits (for those who are imputed to be eligible and observed receiving benefits) suggests that, for most of the sample (pensioners and employees), the imputation is fairly accurate. Estimated take-up in the entire sample is 60%. Results from a Probit model (validated by comparison with similar estimates produced with non-parametric methods) applied on the sample of all (imputed) eligible individuals, which controls for the amount of the benefit, age, education, family size, and housing tenure, indicate that higher benefits increase the probability of participation. People under retirement age are less likely to take-up benefits than those under that age, suggesting that pensioners are more accustomed with bureaucratic procedures than non pensioners. Take up rates also appear to be higher among local authorities tenants, less-educated people (possible because of lower peer-group stigma effect), and larger families.

R. H. Koning G. Ridder (1997), “Rent Assistance and Housing Demand”, *Journal of Public Economics*, 66, 1-31.

Country: The Netherlands

Time period: 1985-1986

Estimated Take-up: 63.9%

This paper aims to assess the effect on housing demand of a rent assistance programme implemented in the Netherlands during the 1980s. The benefit is designed to cover a share of the rent paid by households with income below a certain threshold, and is only paid up to a maximum. A structural model formalises the decision of a typical household to choose a rented accommodation. Regarding take-up, the authors include administrative costs in their structural model in order to account for the large share of households that appear to be eligible for a positive housing benefit but do not receive it. The model is tested against data from the Dutch Housing Needs Survey (HNS) 1985-1986. Eligibility to rent assistance is imputed from income data, with corrections are made to account for discrepancy between survey data on income (for 1985-86) and the one used by the programme to determine eligibility(1984). The take-up rate for rent assistance is estimated at around 64%. Administrative costs are considered to be an important cause of non-participation.

M. L. Hultin (1997), Actual and Potential Recipients of Welfare Benefit with a Focus on Housing Benefits, 1987-1992, The Rockwool Foundation Research Unit, Danmarks Statistik, June.

Country: Denmark

Time period: 1987-1992

Estimated Take-up: 67% among non-pensioners, 85% among pensioners.

The paper presents estimates of the take-up of housing benefits in Denmark, undertaken in the context of a broader project on changes in the propensity of individuals to be law-abiding. These estimates suggest that 67% of those entitled to the housing benefit for non-pensioners received such payments in 1992, and that 85% of eligible people received the separate housing benefit for pensioners. Take-up rates for both housing programmes increased by around 5% since 1987. Overall, the author estimates that government spending on housing benefits would have been approximately 14% higher in 1992 if all benefits had been claimed. Around one third of the reported non-take up is attributed to the elapse of time between moving into a new home and claiming housing benefits. Differences in take-up among pensioners and non-pensioners are attributed to the higher benefit provided to the first group, and to larger income fluctuations for the latter (which both increases movements in and out of the group of people entitled to the benefit, and reduces the length of period over which people receive benefits). The paper also report estimates of take-up for other social programmes in Denmark, calculated in co-operation with the Ministry of Economic Affairs, suggesting a take-up of around 95% for special child benefits for single parents, of 85% for subsidised day care for children, and of 80% for heating supplement for pensioners.

G. Bramley, S. Lancaster, D. Gordon (2000), “Benefit take-up and the geography of poverty in Scotland”, *Regional Studies*, 34(6), 507-519.

Country: Scotland

Time period: 1996

Estimated Take-up: 50%-70% (Income Support), 80%-81.3% (Housing Benefit)

This paper relies on a large scale micro survey, the 1996 Scottish House Condition Survey (SHCS), to analyse the distribution of poverty and take-up of two means tested benefits (Income Support, IS, and Housing Benefit, HB). The authors explore how non-take-up is distributed across Scottish regions and household types. Eligibility is estimated making use of an algorithm that elaborates on the basis of administrative rules and family characteristics and incomes. Results indicate that non-claiming families have fewer children and include older members. Take-up also tends to be higher in more affluent and urban areas.

J. Rouwendal (2002), “Measuring and Explaining the Limited Take-up of the Housing Benefit in the Netherlands”, Tinbergen Institute Discussion Paper, TI 2002-033/3.

Country: The Netherlands

Time period: 1998

Estimated Take-up: 45% to 62%

This paper discusses factors affecting the quality of take-up estimates. These estimates are typically produced by imputing eligibility on the basis of information on family composition and incomes as available from general purpose surveys. The author makes use of a specific dataset (the Dutch Housing Needs Survey, WBO) which contains information about housing benefits together with data about family composition and incomes. One advantage of this survey is that households who do not receive Housing Benefits (HB) are asked to indicate whether they have applied and/or refused the benefit. This information shows that many households that would appear eligible on the basis of a standard imputation procedure

have applied for and been refused the benefit. This suggests that data from standard surveys might not reflect the actual information submitted to the administrative authorities when applying for welfare benefits. To assess the importance of the different timing between benefit application and surveys (benefits received at time T are the outcome of application submitted at time T-1, on the basis of family income and characteristics at that time) the author uses administrative rules to calculate the actual income that must have been used by the administration to grant the benefit for those families that appear to receive it in the survey. This shows substantial discrepancies between reported income and this “backwardly imputed” income (*i.e.* many families that are receiving benefits would not be eligible on the basis of income information provided at the time of the survey). The author then shows this type of measurement error may substantially affect the results of Probit analyses aimed at identifying the determinants of individual take-up behaviour.

3. *Child and Family Benefits*

R. Moffit (1983), “An Economic Model of Welfare Stigma”, *American Economic Review*, vol.73(5), 1023-1035.

Country: United States
Time period: 1976
Estimated Take-up: 45%

This seminal paper suggested for the first time that non participation to welfare programmes by eligible individuals could reflect stigma (a form of disutility arising from participating in the programme itself). The paper presents a simple model in which agents choose simultaneously their optimal labour supply and whether to apply for welfare. Two types of stigma are modelled: a flat component (which reduces the utility of agents if they receive welfare assistance), and a variable component (whose effect on individual utility increases with the amount of the benefit). Data from the 1976 wave of the Panel Study of Income Dynamics (PSID) are used to test empirically the presence of both types of stigma in the case of single female heads of household who are eligible to the Aid to Families with Dependent Children (AFDC). Eligibility is calculated using a simple imputation procedure that yields a take-up rate of 45%. Econometric results are produced by estimating jointly a labour supply equation and a welfare participation equation, to control for endogenous labour supply responses. The main finding is that only the flat component of stigma is significant.

R. Dorsett, C. Heady (1991), “The Take-up of Means-Tested Benefits by Working Families with Children”, *Fiscal Studies*, vol. 12(4), 22-32.

Country: United Kingdom
Time period: 1984 to 1987
Estimated Take-up: 50% (Housing Benefit), 59% (Family Income Supplement)

This paper replicates the framework used by Blundell, Fry and Walker (1988) extending it to the interactions among different benefits. The goal is to test the effect of receipt of one benefit on the take-up of others, with a focus on family income supplement (FIS, a supplement to family income for households where at least one member works 30 or more hours per week.) and housing benefit (HB) in the UK. Interactions with the housing benefit may arise for two main reasons. First, as income received under FIS is taken into account when establishing eligibility to HB, families are likely to evaluate participation in the two schemes jointly. Second, information costs and stigma are likely to exhibit increasing returns (*i.e.* once a household has applied for one benefit, the informational cost and/or the stigma associated with applying to an additional one decline). Data from the Family Expenditure Survey (FES) from 1984 to 1987 are pooled to obtain enough observations of families potentially eligible for FIS. Eligibility (to both

FIS and HB) is imputed using a tax-benefit model developed by the Institute of Fiscal Studies. The empirical strategy for identifying the interactions between the two benefits consists in estimating Probit regressions on the sample of eligible families for take-up of either HB or FIS, which include as explanatory variables eligibility of the other benefit. Results indicate that interactions are important: entitlement to HB increases the probability of taking up FIS by 13%; conversely, entitlement to FIS increases the probability of taking up HB by 4%.

R. Blank, P. Ruggles (1996), “When do Women Use Aid to Families with Dependent Children and Food Stamp? The Dynamics of Eligibility Versus Participation”, *Journal of Human Resources*, 31(1), 57-89.

Country: United States

Time period: 1986-1987

Estimated Take-up: 62%-70% (AFDC); 54%-66% (Food Stamps)

This paper exploits the longitudinal dimension of the Survey of Income and Program Participation (SIPP) to examine the relationship between the decision to participate in a welfare programme and the actual and expected duration of the eligibility spell. The SIPP is a random sample of the US population that contains detailed monthly information about incomes, assets and social transfers. It follows households for up to 18 months, allowing the duration of participation and eligibility to be looked at separately. The authors focus on a sample of single mothers and on their participation/eligibility in the Aid to Families with Dependent Children (AFDC) and Food Stamps (FS) programmes. On the theoretical side, the paper develops a dynamic model of welfare participation in which agents decide whether or not to apply for the programme on the basis of the expected duration of the eligibility spell and of the amount of the benefit. The model is then used to interpret the empirical evidence from the 1986-1987 wave of SIPP. Eligibility is imputed on the basis of administrative rules, family characteristics and incomes collected in the SIPP, but results are more robust relative to other studies that have applied the same methodology because of the monthly record provided by SIPP (as compared to the annual data provided by other surveys) and because SIPP includes detailed information on assets. Results indicate that non participation is correlated with short spells of eligibility. Also, many single mothers leave welfare while being still eligible, partly reflecting underreporting of incomes and assets. The authors conclude that non-take-up is typically confined to “less needy” eligible women that choose not to apply for welfare because their expected eligibility spells are too short to justify the administrative costs related to the application process.

R. Blank (1997), “What cause public assistance caseloads to grow?”, NBER Working Paper 6343, December.

Country: United States

Time period: mid1970s to mid 1990s

Estimated Take-up: 60%-70% (survey data -CPS); 80%-90% (administrative data)

This paper aims to explain the rise in caseloads of Aid to Families with Dependent Children (AFDC) that started in the mid 1980s. The issue of take-up is addressed as one of the potential factors that might have contributed to this increase, together with changes in programme parameters (benefit level, eligibility rules, etc), the pool of eligible families, the political environment and aggregate economic conditions. The author mainly examines monthly data on caseloads by state from the mid 1970s to the mid 1990s, combined with information about the demographic and economic make up of US states obtained from other sources. Two measures of take-up rates are produced order to analyse their potential effect on changes in AFDC caseloads. The first measures relates the number of administrative caseloads to the number of eligible families imputed on the basis of family characteristics and income from the Current Population Survey (CPS), for each state and month; this approach has the advantage of making use of the

more accurate administrative data but runs the risk of comparing numerator and denominator of take-up rates from different data sources. The second measure of take-up relies only on survey information, comparing the number of families that report to be receiving AFDC with those imputed to be eligible (as in the previous measure). Various problems related to the imputation of eligibility from CPS data are discussed. Results show that the first measure of take-up is always higher than the second, but that both follow a similar pattern over time: take-up of AFDC rose during and immediately after the recession of 1990-1991, and fell afterwards. These changes are not fully explained by aggregate state level variables. Estimates also show that changes in take-up rates played a limited role in explaining changes of caseloads.

M. Kim, T. Mergoupis (1997), “The Working Poor and Welfare Reciprocity”, *Journal of Economic Issues*, vol.31(3), 707-728.

Country: United States

Time period: 1976-1988-1989

Estimated Take-up: 64% for AFDC (working poor); 32% for Food Stamps (working poor)

This article is primarily concerned with welfare take-up rates for the working population. The motivation for this study comes from the rising concern about working individuals falling below the poverty line. Data from the Survey of Income and Program Participation (SIPP), an extension of the US Census, are used to compute take-up rates of working individuals in two welfare programmes, Aid to Families with Dependent Children (AFDC) and Food Stamps (FS), means-tested programmes that offer financial or in-kind support to families in need. Results indicate that 64% of employed workers who were eligible for AFDC actually received these benefits, and that take-up for FS benefits was 32%. The authors discuss the characteristics of poor workers, noting their status is not voluntary but mainly determined by the types of paid jobs they are offered. The low level of welfare take-up among these individuals contradicts the stereotyped view of people not moving out of poverty to remain on welfare.

E. V. Edmonds (2002), “Reconsidering the Labelling Effect for Child Benefits: Evidence from a Transition Economy”, *Economic Letters*, 76(3), 303-309.

Country: Slovenia

Time period: 1993

Slovenia has relied on means-tested child benefits (*i.e.* paid to all families with children below 15 years old, or 26 if full time students, whose total household income falls below a given threshold) from 1966 to 1994, when it moved towards a more universal system. This paper relies on data from the 1993 Slovene Family Budget Survey (FBS) to analyse the factors determining participation in the means-tested programme, and to evaluate the distributional impact of the change in the programme rules (from means-tested to universal child benefits). Results indicate that take-up rates were less than full, and that families entitled to higher benefits were more likely to participate (with take-up rates not exceeding 50% for benefits below 50% of average monthly per capita income). Regional and rural effects are also found to be important, suggesting that access to administrative facilities may affect participation. The author notes possible measurement errors in these estimates related to the fact that benefit eligibility is decided on the basis of 1992 incomes, while estimated participation can only be computed using 1993 survey data for incomes. As measurement errors in reported income might also bias the results, parametric exercises are repeated using family characteristics as “instruments” for income. The paper also examines how child benefits, means-tested and universal, affect the overall distribution of income: the pre-1994 system of means-tested benefits turned out to be well targeted on the poorest households, those entitled to the highest benefits and the most likely to apply for the scheme. Analysis of the likely distributional impact of the move to a universal system (no data are available for the post-1994 system) are highly dependent on

the choice of equivalence scale (greater economies of scale leading to benefits that are more concentrated in the poorest households).

M. Queralt, A. D. Witte (2002), “Take-up rates and trade-offs after the age of entitlement: some thoughts and empirical evidence for child care subsidies”, NBER working paper n. 8886, April.

Country: United States

Time period: late 1990s

Estimated Take-up: 44%-53%

Child care subsidies in the United States are paid out in the form of a reimbursement to families that make use of private child care facilities. Only families with children below a certain age are eligible for the subsidy, which is subject to means testing and varies significantly across states. Estimates of take-up rates for these child care subsidies (at only 15%, according to the US Department of Health and Human Services) are also significantly lower than for other welfare benefits (which vary between 43% for take-up of welfare benefits such as Qualified Medicare, and 99% for Medicare Part A). The authors suggest that low estimates of take-up rates for child care subsidies reflect a combination of take-up and service rates: in many states, child care subsidies are not offered to all potentially eligible families because of reduced supply, or because providers might refuse to accept subsidised children by setting their prices well above the subsidy level. In their terminology service rates refer to the number of eligible children or families that are actually “served” by the system, *i.e.* who actually have access to child care facilities. For states that guarantee child care services to all eligible children, such as Rhode Island, administrative data suggest take-up rates between 44% and 53%. The paper also discusses a number of issues related to the production of take-up rates. Some estimates refer to a family base, measuring take-up as the ratio of participating and eligible families, while others have used children as units of analysis, *i.e.* the ratio between children living in participating and in eligible households. The two measures fit different needs, the first concept being especially relevant for improving labour market attachment of young parents, the second being more meaningful when focusing on child poverty and deprivation.

4. Unemployment Benefits

R. Blank, D. Card (1991), “Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation?”, *The Quarterly Journal of Economics*, vol. 106(4), 1157-1189.

Country: United States

Time period: 1977-1987 with an emphasis on 1980-1982

Estimated Take-up: 72.9%

Over the post-war period, the share of the unemployed receiving unemployment insurance (UI) exhibits a downward trend, with significant declines in the early 60's, the late 70's and the early 80's. A number of contributions have identified demographic and programme changes as good candidates to explain the decline of the early decline. However, declines in the early 80's are more puzzling. The contribution by Blank and Card provides a first explanation to this puzzle. Based on data from the Current Population Survey (CPS) to impute eligibility to UI among the unemployed, changes in the fraction of the unemployed receiving UI are correlated with changes in eligibility and in participation. The authors conclude that changes in take-up rates account for most of the decline in the share of insured unemployed receiving UI benefits. Based on aggregate observations over the period 1977 to 1987 for 50 states, they run weighted OLS regressions of take-up rates, across states and over time, on a set of explanatory variables such as the characteristics of the UI system (replacement rates, eligibility criteria, disqualification rates, etc.), coverage of the UI system, unionisation rate, political climate in the state and characteristics of unemployed workers in the state. Results indicate that estimated take-up rates are: *i)*

positively correlated with the state's benefit replacement rate; *ii*) negatively correlated with the disqualification rate (number of UI recipients who are refused benefits before exhaustion because of misconduct); *iii*) positively correlated with the fraction of unionised employees. A similar analysis, performed using microdata from the Panel Study of Income Dynamics (PSID) for the years 1980 to 1982 based on respondents self-reported eligibility, suggests similar conclusions. Overall, changes in take-up rates explain more than half of the decline in insured unemployment in the early 80's. Among the main factors accounting for this decline is the decline in unionisation, and its strong positive association with take-up rates. Replacement and disqualification rates also have significant impact on take-up rates, but these policy parameters seem to have changed little over time. The combined effect of these and other variables explains approximately three quarters of the change in uninsured unemployment.

B. McCall (1995), "The Impact of Unemployment Insurance Benefit Levels on Reciprocity", *Journal of Business and Economic Statistics*, 13(2), 189-198.

Country: United States
Time period: 1982-1991
Estimated Take-up: 65%

This paper analyses the effect of unemployment benefit replacement rates on take-up based on data from the Displaced Workers Survey (DWS), a sub-sample of the Current Population Survey (CPS), in the years 1984 to 1992. In the United States, both eligibility rules and benefit levels from unemployment insurance vary across states. In order to identify all UI eligible unemployed, the author rely on state specific regulations, trying to exclude from the sample of displaced workers all those that appear not to be eligible to UI benefits. As programme eligibility is usually determined by previous working records and wages, information on which is available in the DWS, the imputation procedure relies on a relatively simple set of rules and reliable individual characteristics. Only about 65% of eligible unemployed workers appear to receive UI. Take-up rates also vary over time, falling from 77% in 1982 to 58% in 1987. For the remainder of the 1980s, UI reciprocity rates remained stable at around 59%, while they increased to about 70% in 1991. Blue collar workers are consistently more likely to take-up their benefits than white collar ones, although the gap narrows over time. Estimates from a logit model for UI reciprocity, specifically designed to identify the effect of benefit replacement rates, indicate that this effect is non linear, with higher replacement rates being associated with higher take-up probabilities only for low levels of replacement, while the relationships tends to change sign at high replacement rates.

P. Storer, M. Van Audenrode (1995), "Unemployment Insurance Take-Up Rates in Canada: Facts, Determinants, and Implications", *The Canadian Journal of Economics*, vol. 28(4a), 822-835.

Country: Canada
Time period: 1981-1986
Estimated Take-up: 77%

This paper draws from the methodology developed by Blank and Card (1991) to analyse the effects of the reform of the Canadian UI system. Using, a sub-sample of the Canadian labour force survey (LFS), *i.e.* the Displaced Workers Survey (DWS), the authors examine the group of unemployed workers who are potentially eligible for unemployment benefits but do not claim them. Eligibility is imputed on the basis of individual characteristics and employment records, as collected in the data. The DWS supplement to the LFS only contains information about permanently displaced workers, thus excluding temporary lay-offs (which are relatively rare in Canada). Estimates of UI take-up range between 70% and 83%, with a point estimate of 77%. Results from a logit model for receiving benefits, run on the sample of all eligible unemployed, indicate that take-up decisions are positively affected by union status and educational level. Unemployment duration is also positively correlated with the probability of take-up (while less than 50%

of eligible unemployed claim their benefits in the first month of unemployment, this figure increases steadily with unemployment duration, reaching 90% for spells exceeding four months).

P. Anderson, B. Meyer (1997), “Unemployment Insurance Take-up Rates and the After-Tax Value of Benefits”, *The Quarterly Journal of Economics*, vol. 112(3), 913-937.

Country: United States

Time period: 1979-1982

Estimated Take-up: 76.4% - 60.9% - 46.4% (for various subgroups of unemployed workers)

This paper extends the analysis of Blank and Card (1991) to further explain the decline in the fraction of unemployed workers receiving unemployment insurance (UI) during the 80's in the United States. Although Blank and Card (1991) perform pretty well in explaining the bulk of this decline, it fails to account for around one quarter of the phenomenon. According to the authors, changes in the US fiscal system between 1979 and 1987 are good candidates to explain this residual decline in UI take-up rates. In 1979 a fraction of unemployment benefits became taxable at the federal level, with this fiscal requirement became progressively tighter until 1987 (by when unemployment benefits were fully taxable for all recipients). As estimated take-up rates are positively correlated with benefit replacement rates, the authors suggests that lower UI take-up rates may reflect the decrease of the after-tax value of benefits induced by tax reforms. Using administrative data (the Continuous Wage and Benefit History, CWBH, which contains information from quarterly wage records and UI claims records, thus allowing to base the imputation procedure on the same set of information used by administrative offices themselves) on individuals from the UI system in six states over the period 1979 to 1982, the authors impute eligibility to the UI system for each individual in the sample. Results from various multivariate models indicate that changes in tax requirements for UI recipients account for almost all of the previously unexplained part of this decrease. According to the estimates provided by Anderson and Meyer (1991), a 10% decrease in the after-tax value of benefit would decrease take-up by 1 to 1.5%. In addition, the authors find that a 10% increase in weekly benefits, and a similar increase in their potential duration, will increase take-up rates by 2 to 2.5%, and 0.5 to 1%, respectively.

5. Theoretical papers

G. Yaniv (1997), “Welfare fraud and welfare stigma”, *Journal of Economic Psychology*, vol. 18, 435-451.

This paper develops a model of welfare participation that includes stigma effects and fraudulent behaviour. Agents are assumed to choose to apply for a standard welfare programme that requires some job search and involves some sort of stigmatisation from public exposure. The benefit is only paid if non-labour income falls below a certain threshold. Fraudulent behaviour arises because of imperfect monitoring that allows agents with income higher than the threshold to successfully apply for welfare with some positive probability. The model is fully static but it allows analysing the interaction of stigma and fraud, by comparing individuals that suffer differently from stigmatisation and have different attitudes towards fraudulent behaviour. Simple comparative statics leads to two interesting conclusions. First, under a range of parameter values, stigma effects are shown to be stronger in reducing the application rates of eligible individuals than in discouraging fraud. This result occurs because fraudulent individuals are less sensitive to stigma arising from the probability of being caught and punished so that, other things equal, they are less sensitive to stigma. Second, agents are more sensitive to changes in job search requirements than in the benefit rate. This seems to follow from the specific way in which work requirements are modelled, *i.e.* as a time cost that reduces the average weekly benefit proportionally.

J. Creedy (2002), “Take-up of Means-Tested Benefits and Labour Supply”, *Scottish Journal of Political Economy*, vol. 49(2), 150-161.

This paper presents a static model of welfare participation in which agents simultaneously choose their labour supply and whether to participate in a programme that pays a benefit equal to the difference between individual income and a given threshold. The benefit is gradually withdrawn as individual income increases, *i.e.* only a fraction of individual income is considered in the calculation of the benefit amount. In the model, a flat tax rate applies to all incomes above the threshold (in order to finance the benefit), while applying to the programme requires a fixed administrative (or stigma) cost. The model is developed under various assumptions about functional forms of the various equations. Results from comparative statics indicate that take-up increases with the level of the benefit and with the rate of earnings disregard. A further implication arises from the effect of changes in the rate of earnings disregard: as it increases, agents face higher incentives to take-up jobs, thus reducing almost to zero the number of working recipients. This implication conforms to empirical evidence from several countries that indicate that only a very small fraction of welfare recipients are working.

6. Literature reviews

S. A. Kerr (1982), “Deciding about Supplementary Pensions”, *Journal of Social Policy*, vol. 11(4), 505-517.

Sociological research into the behaviour of people who are eligible but do not claim welfare benefits has showed the difficulties in applying a standard cost-benefit approach. In many cases non-claimants are simply unaware either of the existence of the programme or of their being eligible. In other cases, they say they do not need assistance or merely refuse to talk about it. Many of them do not appear to evaluate the costs and benefits of participation. This paper develops a model in which various steps need to be taken in order to decide to submit a claim. Six steps are identified: *i) perceived need*: agents must realise they are in need of welfare assistance (handicapped, mentally ill, etc. are likely to be in need without acknowledging this); *ii) basic knowledge*: agents must know about the existence of welfare programmes and about how to apply; *iii) perceived eligibility*: agents must realise they are eligible for some benefits; *iv) perceived utility of the benefits*: agents must perceive that there is some utility to be gained from participating in the programme; *v) positive net balance of beliefs and feelings with regard to the (expected) procedural and social outcomes of claiming*: this step represents the standard cost-benefit analysis, *i.e.* agents must perceive that the benefits of participation exceed its costs, both pecuniary and non-pecuniary; *vi) perceived stability of the individual's socio-economic situation*: individuals must expect all the conditions that led to the previous positive balance to last for some time. The reasons for non take-up, thus, vary according to the step at which the application process has stopped. The model is tested against a small sample (25 people) of eligible non-claimant people for supplementary pension benefit in the United Kingdom.

A. B. Atkinson (1989), “The Take-Up of Social Security Benefits”, in A.B. Atkinson, *Poverty and Social Security*, Harvester Wheatsheaf.

This article provides an overview of take-up rates for various social security programmes (one-parent benefit, family income supplement and supplementary benefit) in the United Kingdom. Although mainly focused on the United Kingdom, it also discusses a range of problems that are common to many countries and schemes. The article mainly focuses on the empirical estimation of take-up rates and with the problems related to the use of different sources (multi-purpose surveys, administrative data and specially-designed surveys). Multi-purpose surveys are often the only available source to estimate take-up rates, but this requires the imputation of eligibility for the non-recipients, a procedure that is often subject to errors. Moreover, these surveys may not to be representative of low income groups that are the main focus of

analysis of take-up. Beyond errors due to the imperfection of the imputation procedure and sample size, these surveys may not collect all the information needed to estimate eligibility and, even when collected, it might be subject to measurement or underreporting error. Administrative data generally contain much better information on many crucial variables but only cover welfare recipients, thus excluding the eligible non-recipients. It is sometimes possible to combine administrative and survey data to produce estimated take-up rates, but one must be careful in correcting for the different sampling structures. Specially-designed surveys offer the best solution for estimating take-up rates, but they are costly and they have been rarely done in practice. The Family Finances Survey (FFS), commissioned by the UK Department of Health and Social Security (DHSS), is a specially designed survey. Atkinson concludes by indicating directions for improving research in this area and notes that, despite the numerous difficulties, existing evidence is still very informative about the levels of take-up rates.

P. Craig (1991), “Costs and Benefits: A Review of Research on Take-up of Income-Related Benefits”, *Journal of Social Policy*, vol. 20(4), 537-565.

This article reviews both the economic and the sociological literature on take-up rates. Economists and sociologists have studied the problem of welfare non-take-up using very different methodological approaches, very rarely communicating to each others. The sociological literature has developed behavioural models of the claiming process, in which agents pass a sequence of steps on the way to obtaining the benefit. The model, first proposed by Kerr, describes the claiming process in a number of discrete steps, with failure at each any of them leading to non take-up. Economists have typically followed a more pragmatic approach, estimating multivariate econometric models for the probability of receiving benefits on the sample of all eligible people (identified by some imputation procedure) from individual level datasets. In their empirical work, both economists and sociologists face the problem of identifying the group of eligible non-claimant people. Craig reviews the main results of both streams of literature, and assesses what could be gained by better integrating these two approaches.

W. van Oorshot (1991), “Non-Take-Up of Social Security Benefits in Europe”, *Journal of European Social Policy*, vol. 1(1), 15-30.

This article reviews research on take-up rates in Europe, mainly relying on a sociological perspective. It argues that low levels of welfare benefit take-up are worrying for three sets of reasons. First, if individuals who are targeted by some social programmes are not reached, this reduces the effectiveness of such policies. Second, if only some of all those who have a right to welfare assistance actually receive it, issues of justice arise, particularly when non-take-up is a non-voluntary outcome (as in the case of lack of information). Finally, especially in the case of basic welfare assistance, the objective of relieving people from poverty is harder to achieve if a substantial share of poor people do not receive benefits. The paper stresses that only few countries have produced estimates of take-up rates (Germany, the Netherlands, and the United Kingdom). It also summarise the various reasons for non-take-up put forward in the literature into three broad categories: *i*) factors related to the benefit scheme itself (*e.g.*, low benefits, tight requirements, etc.); *ii*) factors related to the administration (*e.g.*, complex application procedures), and *iii*) factors related to the “client” (*e.g.*, lack of information, stigma, etc.).

W. van Oorschot (1996), “Les causes du non-recours”, *Recherches et prévisions*, 43, 33-49.

This article, which extends the perspective provided in van Oorschot (1991), argues that better understanding the reasons for non-take-up is critical to improve the efficiency of welfare systems. Unlike most other articles on these issues, non-take up behaviour is studied here at the client and at the administration levels. It shows that non take-up may arise from inefficiencies at the level of the benefit scheme and of the administration. Thus, non-take-up cannot be imputed solely to the client’s behaviour but policy makers and administrators are often partly responsible for low levels of take-up. Programmes

that are badly designed and/or badly administered will lead many eligible people not applying. This paper provides a critical discussion of the most popular sociological models of the claim process (based on Kerr's, 1982 and its extensions).

D. K. Remler, J. E. Rachlin, S. A. Glied (2001), "What can the take-up of other programs teach us about how to improve take-up of health insurance programs?", NBER Working Paper 8185, March.

Country: United States

This paper surveys the literature on take-up of welfare benefits (mainly in the United States but also in some other countries) in order to provide guidance on how to improve take-up of health insurance benefits. Existing studies are classified into three groups. The first, and largest, includes studies that rely on cross-sectional variation across individuals in participation to a given programme to estimate the impact of individual characteristics on take-up decisions. The authors criticise this approach, arguing that the effects estimated using this type of variation do not account for individual specificities (*i.e.* these effects are likely to be individual specific and therefore estimates are not fully correct). The second approach is the one developed by Daponte, *et al.* (1998), in which a random sample of families were offered free assistance in checking eligibility as well as in applying to the US food stamp programme. The third group includes papers that make use of change in the rules of welfare programmes to generate exogenous variation in participation. The paper identifies four main results from this literature. First, the amount of benefits is among the most important determinants of participation, with families eligible for higher benefits being more likely to participate into welfare programmes. Second, inconvenience (as measured by some proxy for complexity of the application process, or of the general difficulties in getting information about the programme) is most often not statistically significant (although automatic enrolment, where only positive action is required to decline rather than demand the benefit, appears to have an enormous positive impact on participation). Third, cultural attitudes and stigma, although difficult to be measured or proxied, are found to be unimportant. Fourth, information about the programmes is often important (families that have easier access to this information about programmes, either because of proximity to the administration or because they are targeted by specifically designed advertisement plan, have higher participation rates). They conclude that take-up can be greatly improved through automatic enrolment in programmes and requiring positive action only to refuse it. However, this requires administrative capacity to identify eligible people for specific programmes.

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