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Incentives, rewards, motivation and the receipt of income support

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Executive summary

This report summarises the literature on how individuals receiving government income support change their behaviour when faced with new incentives or requirements placed upon them by the government.

Incentives are usually assumed to shift performance in desired directions within economics. However, experimental studies in psychology and economics have shown that incentives do not always improve performance. Sometimes they actually reduce it.

Several theoretical explanations for these effects have been suggested, but the principal one is the crowding out of intrinsic motivation. According to this perspective, the introduction of an incentive might encourage extrinsic motivation for a task at the cost of intrinsic motivation.

We provide a conceptual framework for understanding how changes in incentives, sanctions and programs to improve job search effectiveness might affect effort levels by welfare recipients to improve their economic circumstances.

The framework emphasises that there can be great heterogeneity in the way individuals respond to changes, since the specific incentives they face differ. This is because the welfare and taxation parameters they face vary according to their individual circumstances.

The framework was used first to show how changes in incentives might affect effort levels where the preferences of individuals do not adapt to the changed circumstances, and then where they may adapt, as the crowding-out theory of intrinsic motivation implies. While the effect of sanctions and changes to incentives on effort are clear in the first case (but often variable across individuals), they can be ambiguous when preferences can change—as the crowding-out theory implies—especially in the face of sanctions and mandatory activities.

Empirical research on the impact of welfare reform confirms that the individual circumstances of welfare recipients who are subject to reform matter a great deal in understanding their responses. Mean effects over a population may mask quite different responses from groups whose circumstances and incentives differ.

Programs providing forms of in-work benefits for those currently on welfare seem to have a positive impact on participation and employment outcomes, though the effects may be small. Mandatory activities, in the form of requiring welfare recipients to undertake specified activities in return for continued receipt of benefits, are typically successful—individuals tend to undertake those activities. However, individuals substitute them for other activities that may also have been beneficial for the outcomes of interest. Hence, the overall impact of mandatory activities on outcomes may not be positive. Job search programs are a case in point. Where individuals are required to undertake specific forms of job search, they may substitute formal job search for informal forms. In many studies, it seems the short-term effects of programs are very often larger than the longer-term effects they provide.

1 Introduction

This report looks at how individuals in receipt of government income support change their behaviour when faced with new incentives or requirements placed upon them by the agency providing their income support. We are interested in the circumstances in which changes in incentives or behavioural requirements might fail to have their intended effect or have unintended consequences. How is this behavioural change influenced by societal norms? The study addresses these issues through a review of relevant literature in economics and psychology.

Three areas of existing research are relevant to this study.

The first strand covers psychological studies of the way external incentives can undermine intrinsic motivation. This is a large body of literature in its own right and a number of meta-analyses of this research already exist (including Deci, Koestner & Ryan 1999; Rummel & Feinberg 1988; Tang & Hall 1995). Much of this literature is based on data collected through laboratory experiments.

The second strand comes from economics and looks at the crowding effect of incentives or punishments, whereby changes in incentives may counteract or reinforce intrinsic motivation. Frey and Jegen (2001), for example, review a series of studies in economics that point to these kinds of effects, in areas such as work effort in employment contracts, taxation compliance and volunteer behaviour. Studies include laboratory and field experiments, as well as more standard case study analyses.

The third strand lies in the program evaluation literature and looks at the impact of welfare reform in various countries on recipient behaviour. This literature is the most pertinent to the issue of behavioural response to changes in incentives or activity requirements among income support recipients. Other literature examines the changes in behaviour arising from new reward systems within organisations (for example, Gibbons 1998; Lazear 2000; Prendergast 1999) or new mandatory requirements (for example, procedural justice literature in relation to taxation). Nevertheless, we focus on studies from the welfare reform literature because these are the most numerous and the most relevant for the population of interest. Moreover, these studies report on interventions that involve changed incentives (eligibility rules and thresholds, payment and taper rates) as well as those that place additional requirements for receipt of payment on individuals, such as mutual obligations (Richardson 2002). This literature includes both experimental and non-experimental studies, but most emphasis is on the non-experimental strand, especially the issue of how to obtain reliable estimates of the impact of interventions and program changes on individual behaviour (see the review of the United States literature, including of methodological issues, in Grogger, Karoly & Klerman 2002).

The next section of this report reviews the psychology literature on the nature of intrinsic and extrinsic motivation and how changes in extrinsic incentives can diminish (crowd-out) intrinsic motivation. This includes theoretical and empirical studies. This section also contains a review of the literature that embeds such ideas theoretically within economics and empirical studies that support the crowding-out thesis. The second section discusses how these ideas might be relevant to welfare reform and how they are used in procedural justice literature. In the third section we set out a simple framework for describing how such ideas operate in the realm of welfare recipients and their responses to changed incentives from governments. This is followed by a review of the empirical welfare reform literature and the final section concludes the report.

2 Extrinsic and intrinsic motivation

2.1 The psychological theoretical motivation literature

Research into why people vary both in their level of motivation for a task and in the reasons why they are motivated to undertake a task has a long history in the psychological literature. Theory distinguishes between different types of motivation in terms of the different underlying attitudes, reasons and goals that give rise to action. The clearest distinction is between intrinsic motivation (doing something because it is inherently interesting or pleasurable) and extrinsic motivation (doing something because one is externally forced to do so, or because action will lead to some sort of reward or outcome). These different types of motivation can produce different standards of subsequent task performance (Ryan & Deci 2000).

Historically, intrinsic motivation was viewed as the most favourable type. More recent approaches such as self-determination theory, however, propose that there are different types of extrinsic motivation. Some may be associated with disinterest and resentment, but others can lead to attitudes of willingness and facilitate self-endorsement of the task. Ryan and Deci (2000) explore the social and environmental conditions that foster active and volitional, rather than passive and controlling, forms of extrinsic motivation.

One finding in this literature that has provoked considerable controversy is that extrinsic rewards can undermine intrinsic motivation. In the Deci, Koestner and Ryan (1999) review, the authors conclude that a wide range of tangible rewards made contingent on task performance reduce intrinsic motivation. So too do threats, deadlines and competitive pressure.

2.2 Intrinsic motivation

Ryan and Deci (2000) argue that although people have the capacity to be intrinsically motivated for an activity, this only occurs under certain conditions. The authors proposed self-determination theory to explain how different social and environmental factors can create conditions that either promote or restrict the expression of intrinsic motivation. Within self-determination theory, Ryan and Deci (2000) postulate cognitive evaluation theory, to argue that intrinsic motivation will only be activated and maintained under conditions that satisfy people's basic psychological needs for competence and autonomy. Specifically, they argue that external events—interpersonal communications and rewards that induce feelings of competence, or efficacy during an action—will increase intrinsic motivation by fulfilling the need for competence. Competence-inducing events are those that present, for example, optimal challenges and non-demeaning evaluations.

However, feelings of competence alone will not necessarily increase intrinsic motivation for a task unless an individual also perceives autonomy, or an internal locus of control. In other words, they must perceive they have a degree of control over their behaviour. Feelings of competence will also vary according to individual capacity to engage in particular tasks.

Responding to the result that rewards made contingent on task performance can reduce intrinsic motivation, Ryan and Deci (2000) use cognitive evaluation theory to propose that external rewards diminish intrinsic motivation because they have the effect of shifting locus of control from an internal to an external location. Conditions that fulfil the need for autonomy—choice and opportunity for self-direction—enhance intrinsic motivation, while conditions perceived as controlling of behaviour will diminish it because they fail to fulfil this need. Autonomy and competence will only be related to intrinsic motivation, however, for activities that hold intrinsic interest for an individual.

2.3 Extrinsic motivation

Internalisation and integration

According to self-determination theory, extrinsic motivation varies in degrees of autonomy. On the one hand, for example, a person who is financially rewarded to undertake job search behaviours could do so simply to avoid sanction and gain the reward. On the other hand, he/she may believe that job search behaviours are essential to getting a job, which is a valued life goal. Both cases reflect the impact of an intervention, but in the former the behaviour is motivated by a need to comply with the external requirement, while the latter involves choice and some level of personal endorsement of the activity.

Self-determination theory describes the distinction between different forms of extrinsic motivation in terms of varying degrees of internalisation and integration of values and behavioural regulations:

- **Internalisation** is the ‘taking in’ of a value or regulation. Motivation for behaviour can range from amotivation to active personal commitment. Greater internalisation is associated with improving engagement, performance and wellbeing.
- **Integration** is the process that transforms the internalised regulations into the self, such that behaviour ‘emanates from a sense of self’ and becomes self-regulating.

Ryan and Deci (2000) postulate four different types of extrinsic motivation:

External regulation: This is the least self-determined form of extrinsic motivation. Behaviours are performed only to obtain a reward or avoid sanction. This type of motivation is experienced as alienating, and individuals thus perceive their actions as having an external locus of control (EPLOC or external perceived locus of causality).

Introjected regulation: In this form of extrinsic motivation, people are motivated by a need to avoid negative emotions such as guilt or anxiety, or to attain ego-enhancements and pride. Thus, regulation is internal to the person because behaviour is performed to maintain ego-integrity or self-esteem. However, this regulation is not fully integrated into the self, thus actions still have an EPLOC.

Identification: Behaviour is recognised as personally valuable and regulation is accepted as one’s own. For example, engaging in compulsory on-the-job training because it is relevant to promotion, which is a career goal.

Integrated regulation: This is the most autonomous form of extrinsic motivation. In this state, the reasons for an action are fully assimilated to the self. The required task is fitted into an individual’s personal values, needs and goals. Though the behaviour is volitional, it is still extrinsically motivated because it is performed with regard to some sort of outcome that is separate to the task.

According to Ryan and Deci (2000), these different types of extrinsic motivation are on a sliding scale. However, movement along the scale is not necessarily smooth. An individual may initially engage in a task through external regulation, but with exposure the individual may come to appreciate the task’s inherent qualities and shift to more autonomous forms of regulation. More autonomous forms of regulation are associated with greater behavioural effectiveness, more interest and effort, and increased personal wellbeing. The authors list a number of studies that have demonstrated this in the classroom context.

Factors that facilitate autonomous regulation of extrinsically motivated behaviours

According to Ryan and Deci (2000), regulation that is internalised and integrated is most likely to arise under conditions that support people’s basic psychological needs for relatedness, competence and autonomy.

- **Relatedness:** The main reason people feel willingly compelled to engage in externally prompted behaviour is if they perceive the task as valuable to the norms and standards of a social group (family, school or society) to

whom they feel (or would like to feel) connected. Motivation is thus affected by the need to relate, or a desire to be a valued member of a social group. This implies that a first step in creating conditions that facilitate internalisation is to build a sense of belonging and connectedness to the social group disseminating the goal. Such belonging is most likely to develop when people feel respected and cared for by significant others or authorities in the social group.

- **Competence:** Individuals cannot accept a goal as their own if they do not feel able and equipped to complete the task. Thus, another step in facilitating internalisation is to provide ‘supports for competence’ by providing the resources and information needed to engage in the task (ensuring that the individual is able to meet the nature of the task) and providing useful feedback.
- **Autonomy:** Conditions that satisfy needs for relatedness and competence can lead to internalisation of regulation. However, according to self-determination theory, such internalisation might stop at the state of introjected regulation, and not proceed to true self-determination. The critical element for integration, in addition to internalisation, is perceived autonomy. For people to integrate regulation, they must ‘inwardly grasp its meaning and worth’ (p. 64). Thus, introjection may be achieved even under quite strict externally controlled conditions, as long as they also support perceived competence and relatedness, but only autonomy-supporting conditions will promote integrated self-regulation. This has been experimentally demonstrated by Deci and colleagues (1994).

Ryan and Deci (2000, p. 65) conclude that:

... social contextual conditions that support one’s feelings of competence, autonomy, and relatedness are the basis for one maintaining intrinsic motivation and becoming more self-determined with respect to extrinsic motivation.

2.4 The empirical psychological literature and meta-analyses

A series of empirical studies are reviewed in Deci, Koestner and Ryan (1999) that look at aspects of motivation theory and the circumstances in which performance-related rewards may reduce intrinsic motivation. We group our discussion around the five major conclusions drawn in Deci, Koestner and Ryan’s review. The evidence on which these conclusions are based is mostly drawn from laboratory-based experiments where individuals are randomised into treatment and control groups. Both groups are typically asked to undertake a series of common games, such as solving particular types of puzzles. The treatment group receives some reward for performing the tasks or is subject to some form of controlling behaviour (for example, they face deadlines for task completion). The control group also undertakes the tasks (solves the puzzles) but is not subject to the same, or any other type of, reward or punishment.

Unexpected and task non-contingent rewards

Unexpected rewards are not detrimental to intrinsic motivation because they are not experienced as informational or controlling. In addition, rewards that are not contingent on performing specific tasks are also not detrimental. This is because people who are not required to engage in the behaviour to receive the reward do not perceive the activity as instrumental to receiving the reward; hence, there is no cognitive re-evaluation to the external locus of control (Deci 1972a).

Task-contingent rewards

As already noted, in a series of laboratory experiments, Deci and others found that task-contingent rewards (rewards given for simply engaging in an activity) decrease intrinsic motivation (Amabile, De Jong & Lepper 1976; Deci 1971, 1972a).

Performance-contingent rewards

Performance-contingent rewards (rewards dependent on the quality of performance of tasks) or punishments decrease intrinsic motivation (Harackiewicz 1979; Deci 1972b for monetary rewards), and also

have a substantial effect on the intrinsic motivation of those not rewarded because of poor performance (Pritchard, Campbell and Campbell 1977). Harackiewicz (1979) found that performance-contingent rewards reduced intrinsic motivation more than task-contingent rewards. The effect of performance-contingent rewards may be mitigated or exacerbated depending on how the rewards are delivered (Deci et al. 1994; Deci, Nezleck & Sheinman 1981; Ryan, Mims & Koestner 1983)—Ryan, Mims and Koestner (1983) argued that performance-contingent rewards may be perceived as either ‘controlling’ or ‘informational’, depending upon how they are administered, and found that controlling rewards decreased intrinsic motivation more than informational rewards.

Verbal rewards versus tangible rewards

Cognitive evaluation theory implies that verbal rewards should be more effective in maintaining intrinsic motivation (Deci 1971; Harackiewicz 1979), and that threats of punishment for poor performance or negative feedback about performance should decrease intrinsic motivation (Deci 1972b). Harackiewicz (1979) found that positive feedback enhanced intrinsic motivation, and that this was independent of the detrimental effect of the reward. That is, there were main effects for both reward and feedback, but no interaction between reward and feedback.

Other influences on intrinsic motivation

Many factors other than rewards influence intrinsic motivation, depending on whether they are experienced as controlling or informational. For example:

- Mossholder (1980) found that externally imposed goal setting for an interesting task decreased intrinsic motivation compared to that for a boring task.
- Amabile, De Jong and Lepper (1976) found that subjects who faced a time deadline were less interested in solving puzzles, which they discussed in reference to the overjustification effect.
- Zuckerman et al. (1978) found that providing choice about the tasks undertaken increases intrinsic motivation.

2.5 Summary of the psychology literature

The studies presented were designed to investigate whether various reward contingencies (task contingent or performance contingent) and different types of feedback affected intrinsic motivation. Overall, this experimental evidence strongly suggests that task-contingent and performance-contingent rewards decrease intrinsic motivation, while positive feedback enhances it.

In many situations, however, use of external rewards or controls is necessary. The critical question, then, is: how may rewards and constraints be used to maintain, or even promote, intrinsic motivation? Studies that address various aspects of this problem conclude that the effect of incentives or sanctions on recipient behaviour may crucially depend upon the nature of interactions with regulators, particularly those enforcing a sanction or giving a reward. Recipients’ perceptions of agency staff, and of the wider agency/department, are also likely to influence how they respond to an incentive or sanction. On the one hand, interactions perceived as informational, and procedures that give participants choice and encourage them to work out their own strategies and solutions, may create environments in which incentives will increase motivation. On the other hand, interactions perceived as threatening and highly controlling of behaviour may mean that incentives work to undermine motivation.

2.6 The economics literature

Modern economics literature includes many studies that look at the impact of incentives on the actions and motivation of individuals. Most often, these issues are analysed within a principal–agent framework. In

this framework, principals and agents contract over something of value to each of them. In some cases, the contract is for the agent to perform a specified task for the principal. In other cases, the agent may purchase a product from the principal. In all cases, important aspects of the contract cannot be fully specified. In some cases, the problem is that the principal cannot observe the effort or performance of the agent in undertaking the specified task in situations where other external factors also influence the eventual outcome. This is a ‘hidden action’ problem, with a classic example being sharecropping, where the weather may affect the eventual crop grown on leased land and the owner cannot observe how hard the land renter worked to produce the crop. Another example is health insurance, where the insurance company does not observe the extent to which the policy holder went, or what preventative actions were taken, in order to avoid an event in which damage occurred. Another example involves ‘information asymmetry’, where the agent only knows factors central to the nature of the contract entered into. Again with health insurance, the potential policy holder may know more about their susceptibility to illness than the insurance company. These simplified examples have well known properties and solutions. The principal should offer a menu of contracts, which induce the agent to engage in the optimal effort level (in the hidden action case) or reveal their ‘type’ (in the information asymmetry case).

Theoretical and empirical literature looking at these issues and their application to real world situations is now substantial. The question typically asked in the research is what the principal must do to ensure the agent engages in the most advantageous level of effort from the principal’s viewpoint or reveals information about themselves that the principal does not possess but needs. The empirical literature involves both experiments within laboratories and in the field.

In the mainstream literature, the way agents assess the value of the benefits they receive from the contract is generally assumed to be fixed, and the behaviour they exhibit reflects changes in the level of benefits they may potentially receive.

Intrinsic motivation and economic theory

The issue of intrinsic and extrinsic motivation has also been studied within this principal–agent framework by Frey and Jegen 2001), among others. What differentiates their work is the assumption that the way agents assess the value of the benefit they receive in the hidden action case can be influenced by other actions the principal may take to encourage greater effort by them. Essentially, as well as the normal ‘price effect’ in response to the change in incentives, Frey and Jegen allow the change to affect the preferences or tastes towards extrinsic rewards. This allows them to show that such changes in incentives can either ‘crowd’ in or out (depending on their effect) the intrinsic motivation of individuals to exhibit effort in the performance of some task. They refer to this as ‘motivation crowding theory’ and argue it has applications in areas such as work effort, volunteering, reciprocity, blood donations, trust, civic duty, environmental care and norm adherence (Frey & Jegen 2001).

Other theoretical studies address:

- the role of psychological costs in preventing the violation of social norms (Lin & Yang 2006)
- the conditions under which monitoring will increase work effort and the conditions under which it might have detrimental effect (Frey 1993)
- how strict laws intended to prevent opportunistic behaviour by free-riding individuals may crowd out civic virtue among other citizens because harsh laws convey a fundamental distrust to citizens (Frey 1997)
- the three important human motives—to reciprocate, the desire for social approval, and the desire to work on interesting tasks—that may cause economic incentives to backfire and reduce an agent’s performance or compliance with rules (Fehr & Falk 2002)
- whether agency theory needs to incorporate the detrimental effects of rewards on intrinsic motivation (Kunz & Pfaff 2002)

- how the introduction of a reward for something that people would normally do for free (for example, for social approval) might reduce the level of contributions through erosion of the ‘norm to contribute’ (Janssen & Mendys-Kamphorst 2004)
- that when a psychological contract exists between principal and agent (worker and employee), the introduction of an external incentive may ‘muddy’ the relationship so that norms of reciprocity or goodwill may be crowded out (Kreps 1997).

Bénabou and Tirole (2003) incorporated crowding out into an economic model. They suggested that agents interpret the offer of a reward as a signal of task attractiveness. Principals have perfect information on the attractiveness of a certain task, and if they know that it is low, they fear that the agent will perform poorly. Thus, they offer a higher incentive to ensure adequate performance. Since the agent, however, only observes an imperfect signal through the offer of a reward, they tend to interpret a higher reward as indicative of low-task attractiveness. This subsequently reduces performance. Finally, Bénabou and Tirole (2006) developed a theoretical economic model in which crowding out of prosocial behaviour (volunteer work, giving blood, joining rescue squads and so on) by extrinsic incentives was possible.

Laboratory and field experiments in economics

A growing experimental literature has both influenced and responded to this theoretical work. Mostly this literature consists of experiments conducted in laboratories on subjects (often university students), but in a small number of cases the experiments are conducted in the field. The literature reviewed here involves studies of the ways individuals respond to changes in incentives. Topics include:

- whether and how increased monitoring affects work performance (Dickinson & Villeval 2008)
- what the effects of differently sized monetary incentives are on task performance (Gneezy & Rustichini 2000b; Pokorny 2008)
- whether incentives undermine voluntary cooperation (Fehr & Gächter 2000)
- the severity of contract enforcement on the behaviour of individuals in complying with contractual obligations through its impact on trust between individuals (Bohnet, Frey & Huck 2001)
- whether a mild law (in contrast to no law or a severe law) would achieve compliance more effectively in a public goods game (a game where individuals choose how much to contribute to a common fund from an endowment they receive) if the law is externally imposed by an experimenter or endogenously chosen by participants (Tyran & Feld 2006)
- the relative effects of incentives and intentions in producing non-cooperative behaviour between principals and agents (Houser et al. 2008)
- whether the introduction of a fine would reduce the occurrence of undesirable behaviour (late pick-up by parents of children in Israeli child care centres—Gneezy & Rustichini 2000a)
- the impact of public versus private implementation of punishment in terms of player cooperation (Xiao & Houser 2006).

Dickinson and Villeval (2008) analysed whether and how increased monitoring affects work performance, and specifically whether it affected it through crowding out of intrinsic motivation; violations of the norm of reciprocity, or crowding out of reciprocity (because agents perceive principals’ monitoring as signals of distrust); or whether increased intensity of monitoring, even if monitoring is imperfect, backfires because it gets in the way of an interpersonal relationship between principal and agent.

Dickinson and Villeval (2008) found that monitoring exerted a disciplining effect, but more intense monitoring crowded out effort, and this occurred to a greater degree when the relationship was interpersonal. The mechanism by which crowding out occurred was through deterioration of the reciprocity norm, not through

a reduction in the task's intrinsic motivation. Hence, Dickinson and Villeval concluded that monitoring has a disciplining effect, although sometimes with hidden costs. In particular, if the relationship between agent and principal is interpersonal, the effects of harsh monitoring can be more detrimental. The mistrust the agent may feel is 'reciprocated' through lower output.

The type of theoretical innovation involved in this literature has yet to be widely endorsed in mainstream economics literature. The main reason for this is that economists are much more comfortable dealing with and analysing the impact of relative price shifts or income effects than they are allowing preferences to change, especially endogenously. It will likely be some time before the theoretical literature takes hold within the mainstream, even if the direction and findings of the empirical work receives broader acceptance.

2.7 Summary of the section

It is usually assumed that incentives improve performance within principal–agent relationships. However, experimental studies in psychology and economics have shown that incentives do not always improve performance. Sometimes they reduce it in comparison to no incentive at all. Several theoretical explanations for these effects have been suggested, but the principal one is motivation crowding out. According to this perspective, the introduction of an incentive might encourage extrinsic motivation for a task at the cost of intrinsic motivation.

3 Motivation, incentives and institutional behaviour

In this section we briefly set out some implications of the discussion of the previous section for the reform of welfare payments and the behaviours we expect of recipients and how they apply in the procedural justice literature. This is informative for the way institutions should behave towards individuals so that the institutions' own goals are met most effectively.

3.1 Reform of welfare and the way authorities deal with individuals

The psychological studies presented in the previous section indicated that task-contingent and performance-contingent rewards can decrease intrinsic motivation, while positive feedback enhances it. However, since use of external rewards or controls is necessary in many situations, the key question is how these can be used to maintain, or even promote, intrinsic motivation.

Findings from the literature reviewed in Sections 1 and 2 suggest that the effectiveness of sanctions and rewards may depend upon the nature of individuals' interactions with agency staff, particularly those enforcing a sanction or giving a reward.

On the one hand, interactions perceived as informational, and procedures that give participants choice and encourage them to work out their own strategies and solutions, may create environments in which incentives increase motivation. On the other hand, interactions perceived as threatening and highly controlling of behaviour may mean that incentives undermine motivation. This is an important link to the literature on issues such as tax compliance and procedural justice discussed in the following subsection. It shows that the perceived fairness of procedures involved in decision making and the perceived treatment received from the decision maker influences motivation to comply with regulatory authorities.

At least some evidence from the psychology literature suggests that performance-contingent rewards do not necessarily decrease intrinsic motivation as long as the administration of the reward is informational rather than controlling. This highlights the need to consider the psychological meaning of the reward for the recipient, rather than the nature or contingency of the reward as such. In the real world, this implies that administration of incentives to welfare recipients should be accompanied by clear, expected standards and positive feedback as progress is being made.

These psychology findings suggest it may be possible to use external motivators (rewards, sanctions or other changes to the social contract) in ways that facilitate long-term behavioural change among welfare recipients. However, the manner in which tasks are requested, administered, monitored and so on must be carefully considered.

First, agencies should aim for integration of objectives by individuals and avoid imposing behaviours. For example, imagine that an agency reduced payments to lone mothers if they did not apply for a certain number of jobs in a set period. If simply imposed on the mothers, the job-search behaviour may become internal, but would still be motivated by a desire to avoid the sanction. If, on the other hand, the change in contract promoted integration, such behaviour would have become assimilated to the self, and in line with personal values, needs and goals. Thus, job search behaviour would be more likely to continue in the long term.

Second, to promote integration, agencies should concentrate on creating social-contextual conditions that facilitate self-determination. This should be done by recognising basic psychological needs for competence, autonomy and relatedness, and structuring requests for compliance and/or rewards in ways that aim to

satisfy these needs. Psychological studies emphasise the importance of providing people with a personally meaningful rationale for engaging in behaviour, acknowledgement of feelings, and a sense of choice. Some hypothetical examples related to job search include:

- **Rationale**—the agency should ensure that the individual receives a rationale for seeking work that is personally salient. The rationale may differ across subgroups of the population. For example, a meaningful rationale for a lone mother seeking work may differ from a meaningful rationale for someone who is on a disability pension seeking work.
- **Acknowledgement**—it should be recognised that job search may be difficult, frustrating, time consuming and so on. It would be important for the agency to convey that feelings of anger, resentment and anxiety might be legitimate and understandable. In addition, accompanying this recognition should be offers of support to achieve the task (for example, help with filling out applications) thereby satisfying the need for competence.
- **Choice and minimal pressure**—requests, sanctions and rewards to seek work should be administered in ways that give recipients choice about how and when to act, and avoid commanding language and threats of punishment.

3.2 Procedural justice and legitimacy

Theories of procedural justice originated within legal and social psychology domains. They focus on the influence of formal and informal rules and policies on fairness perceptions in shaping people's reactions to authorities (Blader & Tyler 2003a; 2003b). Evidence for these concepts is drawn from a range of applications. These include compliance issues (particularly with civil matters such as tax evasion) and attitudes and behaviour within organisations (such as employee efficiency, motivation, and acceptance and compliance with organisational rules).

In a nutshell, it has been repeatedly demonstrated that people care about not just the outcome of a decision that concerns them, but also the way in which the decision was made. Specifically, they are concerned with the fairness of the procedure itself as well as the fairness of the way they have been treated. In fact, it has been shown that when individuals (agents) perceive these dimensions as just and fair, they are more likely to accept a decision and comply with the authority's requests.

Evidence suggests that procedural justice has the effect that it does because it is an antecedent of **legitimacy**. In procedural justice literature, legitimacy is usually defined as the belief that authorities do their job well and are entitled to be obeyed (Murphy, Tyler & Curtis 2009). People who believe they have been fairly treated by an authority are more likely to regard the authority as legitimate. They also are more likely to believe that they should comply with the rules and decisions of the authority voluntarily, rather than out of fear of sanction or anticipation of reward. Tyler (2004), for example, showed that New Yorkers were more likely to comply with law enforcement officials if they regarded the police as having more legitimacy.

Blader and Tyler's four-component model of procedural justice

There is ample evidence that people are more likely to comply with an authority's directives if they perceive that they have been dealt with in a fair manner and that the processes of decision making by the authority were fair. Perceived procedural justice matters for an individual's decision to comply, yet this does not explain what it is about the procedures that make them just or unjust in the eye of the individual. More recent research has examined the components of procedural justice in more detail. Blader and Tyler (2003a; 2003b) developed the four-component model to organise an individual's procedural justice considerations. The model proposes two theoretically orthogonal dimensions (**type** of justice and **source** of justice), each consisting of two components.

This first dimension focuses on the types of concerns people evaluate in justice terms. A distinction is made between (1) how decisions are made, or the perceived justice of decision-making processes, and (2) the quality of treatment an individual receives from a decision maker.

The second dimension focuses on the source of the information people use to make justice evaluations. A distinction is made between two basic sources: (1) formal official rules and proceedings, encompassing the policies and prevailing norms of the group as a whole (for example, Centrelink as an organisation), and (2) informal proceedings contained within interpersonal experiences with particular representatives of the group (for example, Centrelink staff, police officers).

These two dimensions are crossed to establish a model that stipulates four types of concerns that people have when assessing the fairness of a process, relating to formal and informal decision making and formal and informal quality of treatment.

Similar criteria affect evaluations of fairness across both formal and informal dimensions:

1. What is a fair decision-making process? Theorists emphasise several criteria. These include perceived neutrality, care and consistency, and use of objective criteria. When these criteria are met, people will be more inclined to accept a decision.
2. What is fair treatment? Quality of treatment concerns people's reactions to the climate of the procedure's implementation, particularly the interpersonal experiences with authorities. Important criteria that determine an individual's judgment of fairness include perceptions that an authority has tried to be fair, has treated the individual with dignity and respect, and has treated the individual in an impartial way. When these criteria are met, people are more likely to respect the authority as entitled to be obeyed.

Procedural justice and welfare

There are no studies on procedural justice in a welfare setting, with the exception of the recent Australian study discussed briefly below. However, some evidence that procedural justice principles might increase cooperation among non-compliant welfare recipients comes from the taxation context. Wenzel (2006) examined the effectiveness of different styles of return-lodgement reminder letters from the Australian Taxation Office on subsequent compliance and noncompliance. Three different sorts of letters were sent at random to 2,052 Australian taxpayers who had failed to lodge a return. The first was the standard reminder notice, which emphasised the individual's legal obligations and the penalties that could be imposed by the authority for continued failure to lodge a tax return. The other letters focused on principles of procedural fairness. One was an **interpersonal fairness** letter, which emphasised consideration and respect for taxpayers (for example, recognising that the recipient could be facing personal and financial hardship), and the second was **informational justice** letter, which informed taxpayers of their obligations, but also provided justifications for the Australian Taxation Office's decision to pursue the matter further (for example, non-lodgement disadvantages those who have lodged their return; taxes fund essential services). Both the interpersonal and informational letter resulted in greater lodgement compliance than the standard letter.

Some findings from the welfare reform literature suggest that procedural justice principles could be applied to increase compliance among welfare recipients. Lee, Slack and Lewis (2004) used longitudinal data to examine compliance behaviour among 1,998 female Temporary Assistance for Needy Families (TANF) recipients in Illinois. It was found that women who had been recently sanctioned for noncompliance were more likely to comply with obligations, exit the welfare system, become employed, and increase their earnings if their caseworkers had taken time to explain the rules and reporting obligations to them. The authors suggested that, instead of focusing on the individual as the source of noncompliance, the welfare system itself could increase compliance by enhancing recipients' understanding of welfare rules.

Finally, Murphy, Tyler & Curtis (2009) conducted a study with a sample of 111 university students in Australia receiving social security benefits, mostly Youth Allowance. The students completed a survey measuring perceived procedural justice (for example, treated politely and with respect and dignity by Centrelink staff) and perceived legitimacy of the underlying laws, rules and policies of Australia's welfare system (for example, the legitimacy of Centrelink's underlying laws; whether the laws are consistent with the views of Australians). Compliance behaviour was assessed as the degree of defiance the participant exhibited towards Centrelink (for example, 'I tend to be defiant towards Centrelink'). Results showed that students who reported greater

perceptions of both procedural justice and legitimacy were less defiant towards Centrelink. However, there was an interaction between procedural justice and legitimacy, such that procedural justice was only associated with reduced defiance for students who questioned the legitimacy of the law. There was no effect of procedural justice when perceived legitimacy was high. The implication of these findings is that procedural justice may be more or less effective depending upon the characteristics and circumstances of subgroups of welfare recipients.

Summary of the procedural justice literature

Procedural justice explains people's compliance with authorities as a function of perceived quality of treatment and the nature of decision-making processes, rather than as a function of the actual outcome of a decision. Procedural justice research is probably more relevant to an understanding of the effect of sanctions or monitoring on welfare compliance than the effects of rewards or incentives. Overall, the research suggests that reliance on enforcement strategies that are punitive and coercive in nature will not be effective in nurturing compliance among welfare recipients. Insights from this field regarding the detrimental effect of sanctions on perceptions of fairness, and the consequences for perceptions of legitimacy, may offer another explanation for the findings within the experimental economic field where sanctions and fines backfire and operate to increase noncooperation.

4 A conceptual framework for analysing welfare reform

We now aim to place the theoretical discussion from economics about the impact of incentives within a conventional framework that will allow us to trace how changes in incentives might affect the effort levels of individuals on welfare to obtain higher levels of income from employment. We first consider the ‘standard’ situation where the preferences of individuals are fixed and then the situation where the preferences of individuals might adjust to changes in incentives—that is, where changes in incentives might crowd out (or reinforce) the intrinsic motivation of individuals on welfare to exert effort to improve their financial situation.

Without dealing with principal–agent interactions explicitly, the framework effectively takes as its starting point a principal–agent relationship where the provider of welfare is the principal and the recipient the agent. We assume there is a hidden action problem—the principal does not observe the job search effort of the welfare recipient and changes incentives or rules to encourage greater effort.

4.1 The set-up for the framework

The set-up for the framework is as follows:

The subjects (or agents) are all welfare recipients. They may, however, currently be employed. Their choices involve whether to undertake actions that may improve their wellbeing. Specifically, if agents expend effort— e —this may lead to them finding a higher paying job that increases their net income, but this depends on the welfare receipt parameters they face.

The probability of finding a higher paying job depends on effort levels, so we write this function as $p(e)$, with $p_e(e) > 0$ and $p_{ee}(e) < 0$, so the probability of obtaining a higher paying job increases with effort, but at a decreasing rate. The wage of the higher paying job the individual may find does not depend on the effort with which they search, however, it just depends on their skills. The p function could be written with an i subscript since it is possible that individuals might vary in the efficiency with which they search for a higher paying job.

If an individual finds a higher paying job, the extra income they receive can be summarised as

$$\Delta y_i = [(W^p - W^c)(1 - t_i)(1 - v_i)] \quad (1)$$

where:

- Δy_i is the change in the individual’s disposable weekly income arising from the increased wage income
- W^p is the gross weekly wage in the alternative job
- W^c is the gross weekly wage individuals earn in their current job (if not employed this is equal to zero)
- t_i is the marginal tax rate on the additional wage income
- v_i is the rate at which the individual’s current welfare payments are clawed back with additional income (this assumes only the income net of taxation is clawed back).

Whether the higher paying job actually delivers higher net disposable income for individuals depends on the taxation and clawback parameters they face. As is well known, individuals on welfare often face very high effective marginal tax rates on additional income, driven largely by the clawback parameter(s) of the multiple payments they may receive. Therefore, in extreme cases $v_i > 1$ and individuals may lower their net disposable income if they increase their gross income.

The expected pay-off associated with any given effort to find a higher paying job is given by:

$$B_i = p_i(e_i) \Delta y_i = p(e) * [(W^p - W^c)(1 - t_i)(1 - v_i)] \tag{2}$$

Given the assumption that $p_e(e) > 0$, whether B_i is increasing in effort depends on the sign of the expression in square brackets, $[(W^p - W^c)(1 - t_i)(1 - v_i)]$, which largely depends on v , the clawback parameter.

At the same time, we assume that the utility individuals would gain from an increase in their net disposable income—associated with the effort of finding the higher wage job—can be written as depending on the expected amount of the net increase and the costs associated with that level of effort $c(e_i)$. Therefore, both arguments of the utility function are themselves functions of the effort level e :

$$U_i = U(B_i(e_i), c_i(e_i)) \tag{3}$$

We assume that $U_{B_i} > 0$, $U_{c_i} < 0$, so utility increases with the financial return from a higher paid job and falls with the effort involved in obtaining the higher paid job, because effort is costly. This means we can draw indifference curves that are positively sloped (see Figure 1). The costs associated with effort may be financial through transport costs, for example, or the opportunity cost of individuals' time, or may involve psychic costs from having to seek favour from other individuals. We assume these costs are increasing in effort at an increasing rate, so $c_e(e) > 0$ and $c_{ee}(e) > 0$. Note that both arguments of the utility function have i subscripts, so both the net benefits individuals may obtain from a new job and their costs associated with the effort involved are idiosyncratic.

We assume that a government making welfare payments to individuals is interested in several factors. First, it wants to minimise its welfare payments subject to providing some level of livelihood to recipients that the community finds acceptable. Second, it views effort by individuals to improve their circumstances as a productive activity, which it seeks to encourage though the welfare parameters and activity tests it sets. However, the government either does not observe the effort levels of individuals to improve their circumstances or it observes an imperfect signal of the effort level.

We now use this set-up in a series of diagrams to indicate a number of findings about the effort level individuals choose to exert in finding a higher paid job and how they respond to changes in the welfare parameters they face.

4.2 Responses to changes in incentives with fixed preferences

As already noted, we can draw indifference curves that capture important dimensions of the utility of individuals in relation to the potential additional net income associated with their effort to increase it. These indifference curves depict differing combinations of expected net benefits and costly effort levels that provide individuals with the same level of utility. Since effort is costly (by assumption), individuals need to receive higher expected pay-offs from their effort to maintain their utility. This means that these indifference curves will be positively sloping in effort. Moreover, since effort is increasingly costly, the lines will increase more with higher effort levels as individuals require ever higher amounts of expected increased disposable income to compensate for the increasingly costly effort.

This situation is depicted in Figure 1, in the curve U^1 . It shows differing combinations of additional expected disposable income and effort that provide the same level of utility for a representative individual. The curve U^2 depicts a higher level indifference curve. Individuals would prefer U^2 over U^1 since it involves (looking vertically) higher levels of expected disposable income for the same level of effort than U^1 .

The second curve in Figure 1, the dashed function, shows a hypothetical expected disposable income function. We assume the clawback and tax rates are such that Δy_i is positive, which means the shape of the function is determined by the shape of $p(e)$ for the individual. Since it was assumed to be increasing with effort at a decreasing rate (it exhibits diminishing returns to effort), the expected net benefit curve is also positively sloped, but additional effort at already high levels of effort provides a lower expected benefit for individuals

than at low levels of effort. In Figure 1, individuals facing an expected pay-off function, such as that depicted, would choose the effort level e^* shown, because it provides the highest possible utility level they can obtain. All other utility curves that intersect with the pay-off function involve lower levels of utility, so the individual maximises their utility (welfare) at the point e^* .

Figure 1: Basic structure—one individual, parallel indifference curves depicted

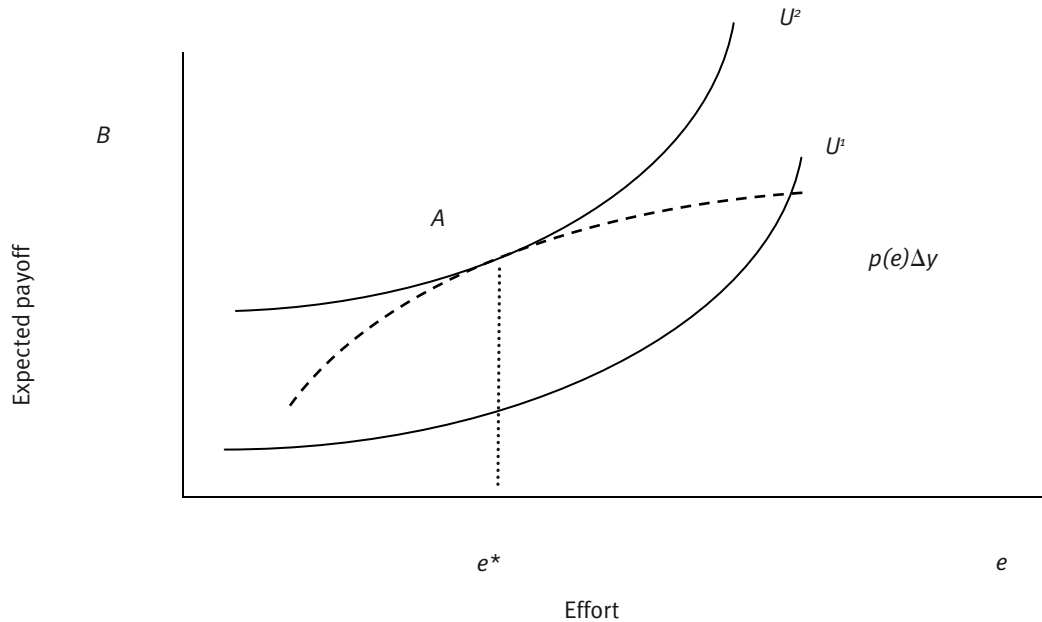
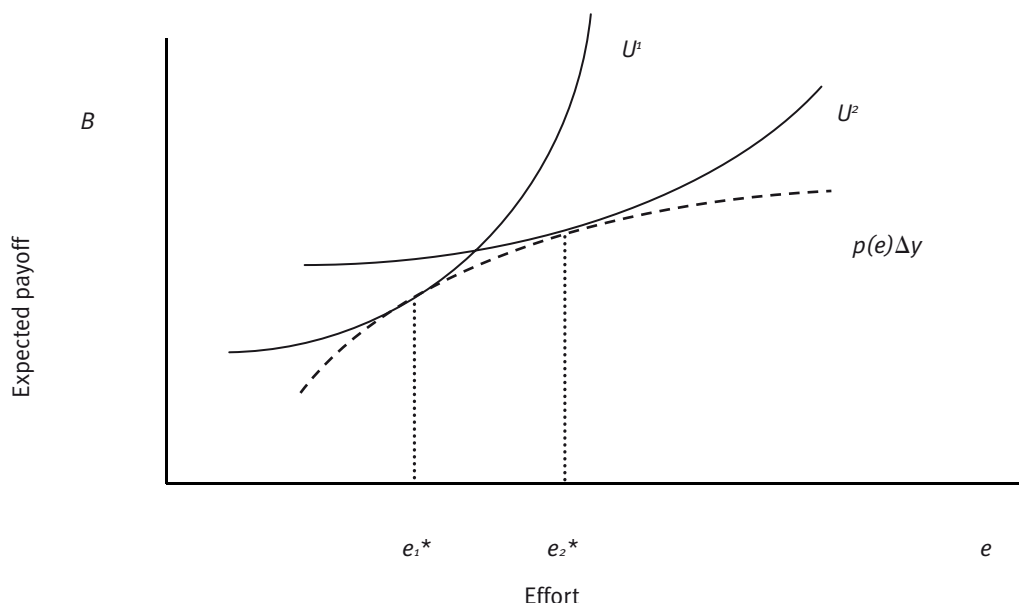


Figure 2 shows the situation where we have two individuals whose indifference curves between effort and the net pay-off from it vary, but whose expected pay-off functions are identical. This difference in indifference curves may occur because the two individuals have differing cost functions associated with effort. The individual subscripted as number 1 has higher costs associated with effort because at any value of effort that individual requires more expected net income if their effort level rises to maintain their level of utility. Alternatively, the difference in indifference curves may occur because the two individuals value the increase in net income associated from the higher paying job differently. These differences may also reflect differing personal attitudes towards work, values and family circumstances as well as different social norms in the groups in which they belong. In this situation, the two individuals would choose differing levels of effort, with the individual for whom effort is least costly (the net income is valued most highly), individual number 2, choosing the higher level of effort.

Figure 2: Two individuals with different indifference curves



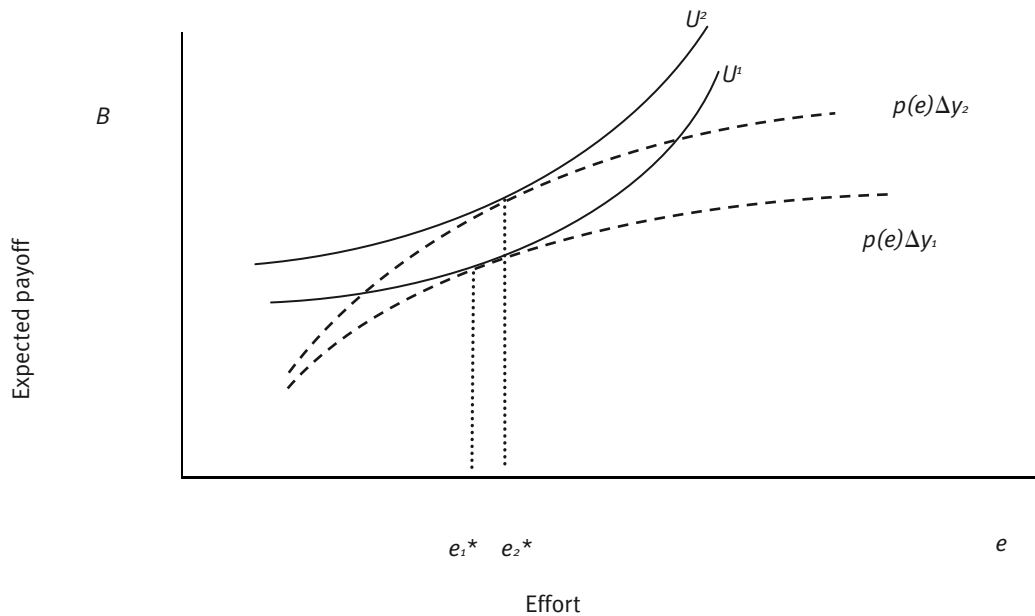
We can also show the case where individuals with identical indifference curves would choose differing levels of effort because they faced differing pay-off functions, either because they varied in their search efficiency or faced different rewards in alternative jobs or clawback parameters.

With individuals optimally choosing varying levels of effort, it should be clear that some individuals would choose very low levels of effort. These will be people who either have very ‘steep’ indifference curves (so effort is extremely costly) or who face very ‘flat’ expected pay-off functions. In fact, those whose pay-off functions are negative because the clawback parameter is greater than 1 will exert no effort in trying to find a higher paying job.

Another important case to examine is how individuals would respond to a change in the expected pay-off from a higher paying job. This expected pay-off may change for a number of reasons. It may reflect a change in either $p(e)$ or Δy . The first case (a change in $p(e)$) would arise if the efficiency with which individuals searched changed. The second case (a change in Δy) would arise if either the taxation rate or the clawback parameter changed. Alternatively, it might change if labour market conditions affected the magnitude of the higher wage individuals might be paid (changes in labour market conditions might also be expected to change $p(e)$). One such situation is shown in Figure 3. There the initial optimal effort level for the individual is e_1^* . However, the expected net benefit from a higher paying job increases, due to an increase in Δy . This involves a non-parallel shift up in the benefit function, depicted in $p(e)\Delta y_2$. This allows the individual to reach a new, higher indifference curve and the optimal effort level for the individual is e_2^* , which involves more effort than e_1^* .

Though it is not shown, the shift from effort level e_1^* to e_2^* involves the combination of an ‘income’ and a ‘substitution’ effect, as occurs in the standard analysis of a change in the price of a commodity. As in other labour market situations, the income and substitution effects work in opposite directions. Visually, in Figure 3, if the original expected pay-off function shifted up in a parallel fashion, it would touch the indifference curve U^2 to the left of e_1^* . This is the income effect. The shift around the indifference curve U^2 is the substitution effect that comes about because the pay-off associated with effort has increased.

Figure 3: Change in optimal effort with an increase in incentives, fixed preferences



This framework now allows us to analyse a number of types of interventions governments have used to encourage people on welfare to enter into employment or further engage in employment.

Financial incentives and bonuses

Financial incentives and bonuses include reductions in the clawback parameter, reductions in the tax rate and increases in ‘in work’ benefits, such as earned income tax credits.

The theoretical impact of these types of changed incentives is already shown in Figure 3. The first two examples mentioned involve changes in Δy made through changes in the parameters. The third example—additional in work benefits—might be modelled as a change in the tax rate or as an increase in W^p , the alternative high-paying job. The theoretical impact of these initiatives is shown in Figure 3 for a ‘representative’ individual, with the initiative resulting in an increase in the optimal search level of the individual. As already noted, however, not all individuals face upward sloping $p(e)\Delta y$ functions. For individuals whose pre-change optimal effort level is zero because their $p(e)\Delta y$ is negatively sloped (because $\Delta y < 0$), the change in parameters may not be sufficient to change their incentives, so their optimal level of effort may remain zero. Similarly, individuals with high costs of effort or strong preferences against effort may still optimally choose zero effort. That is, those already at a corner solution may not be induced to move from that position.

This potential heterogeneity in responses arising from differing incentives is born out in empirical studies. Bitler, Gelbach and Hoynes (2006, 2008), for example, analyse welfare reforms in two countries and their distributional effects. In both studies the authors find that the effects of reforms vary substantially across the population, but reflect the variation in the incentives faced by individuals. That is, there is heterogeneity observed in the outcomes of individuals arising from welfare reforms because they face differing incentives to change their behaviour.

Mandatory activities, sanctions and/or activity-related benefits

These actions involve making the receipt of welfare dependent on actions undertaken by beneficiaries. We do not show this explicitly in a figure, although the impact of such policies in theory should be obvious. To the extent that these initiatives can be characterised as involving a requirement that all individuals meet some specified level of effort, this can be depicted as a vertical line on the figures presented so far. Individuals

whose optimal level of effort is less than this will have to increase their effort to that point, while those whose optimal level of effort exceeds it will continue to undertake more than the required effort, provided their $p(e)$ function does not shift down in response to the additional effort provided by other welfare recipients. If the initiative is to enforce more effectively a previously announced minimum level of effort, the effect should be the same as just described.

It is worth noting one way in which this set of initiatives may affect behaviour is to induce individuals to engage in more effort to find a job, but not accept it if they are successful. Individuals whose effort level is zero because of the incentives they face (that is, because $\Delta y < 0$), will still not want to accept the job because they will be worse off by doing so. Where individuals accept employment because the new regime makes acceptance mandatory, their tenure may well be short lived. Only individuals with high effort costs but positive potential pay-offs from a job will accept a new job and want to retain it under these types of initiatives.

Monitoring, counselling and job search programs

Monitoring, counselling and job search programs aim either to assess how effectively individuals engage in job search, and/or to provide services that might improve its effectiveness for beneficiaries.

These interventions can be seen as initiatives that aim to improve the effectiveness with which individual search effort is translated into improved employment opportunities, or as an increase in the function $p(e)$. Once more, the theoretical impact of these kinds of initiatives for a 'representative' individual is shown, resulting in an increase in the optimal search level. However, as already pointed out, the changes will not be enough to induce effort from those whose optimal effort level was previously zero. Those at a corner solution (zero effort) because $\Delta y < 0$ will definitely not change their effort level, since any change in $p(e)$ still leaves $\Delta y < 0$, so the $p(e)\Delta y$ function remains negatively sloped in effort.

Increases or decreases in benefits

Studies of increases or decreases in benefits aim to assess how the magnitude of benefits might affect the behaviour of beneficiaries. This type of change cannot be easily shown in the framework we have used in this section that focuses on responses to initiatives where welfare recipients are considering actions that might improve their financial circumstances—it is therefore about behaviour at the margin. Other theoretical approaches would treat welfare payments as akin to non-labour income, which should have a negative impact on labour supply. In the framework used here, as in relation to Figure 3 where the change in optimal effort for an increase in the pay-off function was discussed, the associated income effect was negative, but more than offset by the substitution effect so the representative individual increased effort levels. Hence, with fixed preferences, we can think of the income effect from a reduction in benefits as likely to lead to an increase in effort among individuals to find higher paying jobs, but this does not follow from any real analysis of the framework used here.

4.3 Responses to changes in incentives with responsive preferences

All analysis in the preceding subsection is based on the assumption that changes in government policy influence individual effort levels only through the changes in the rewards associated with effort they provide. The extrinsic/intrinsic motivation literature points to the possibility that government actions might also influence the way individuals view or value an activity, changing their valuation of the effort they put into improving their financial circumstances. Three circumstances might be envisaged for this.

First, governments might act to change or influence the preferences of individuals, including through changes in social norms. The consequences of successfully changing an individual's attitude towards effort on the optimal effort level is depicted in Figure 2, through the change in the shape of indifference curves of the type held by U^1 to U^2 .

Second, the government might change welfare recipient incentives in a way that changes their attitudes or preferences towards effort in a way that reinforces the effect of the change in incentives. For example, changes lowering the clawback parameters might encourage more effort on their own. In addition, the change may convince welfare recipients that the government values them improving their financial circumstances, so their preferences value that outcome more highly, inducing more effort than would have been the case had their preferences remained unchanged.

This possibility is depicted in Figure 4. As in Figure 2, the change in the expected pay-off to effort involves a non-parallel shift up in the pay-off function. This induces an increase in the optimal effort level from e_1^* to e_2^* . In addition, the change in incentives changes the way individuals assess the cost of the effort, so the shape of the individual's indifference curve changes (becomes flatter) from U^1 to U^3 . This induces a further increase in optimal effort level to e_3^* . In this case, the reinforcing nature of the change in preferences induces further effort on the individual's part.

The opposite is also possible. The government might induce more effort by cutting benefits or setting mandatory effort levels, but at the same time some individuals might change their preferences away from valuing additional resources, instead disliking effort more. In these cases the change in motivation acts in the opposite direction on optimal effort from the change in incentives, at least for some individuals. This possibility is depicted in Figure 5, where the indifference curve U^3 is steeper than U^1 , which here means that the impact of the incentive is crowded out by the change in the preferences it induces. This could also arise with the introduction of some mandatory effort level among those whose optimal effort level was higher than the mandatory level, inducing them to exert less effort in improving their financial circumstances than before.

Figures 4 and 5 suggest that with responsive preferences, it is always preferable for governments to reduce taxes and clawback parameters rather than reduce benefits or increase sanctions if they are only interested in the motivation or effort levels of welfare recipients. Of course, governments often have multiple objectives, including budgetary goals.

Figure 4: Change in optimal effort with an increase in incentives, reinforcing motivation

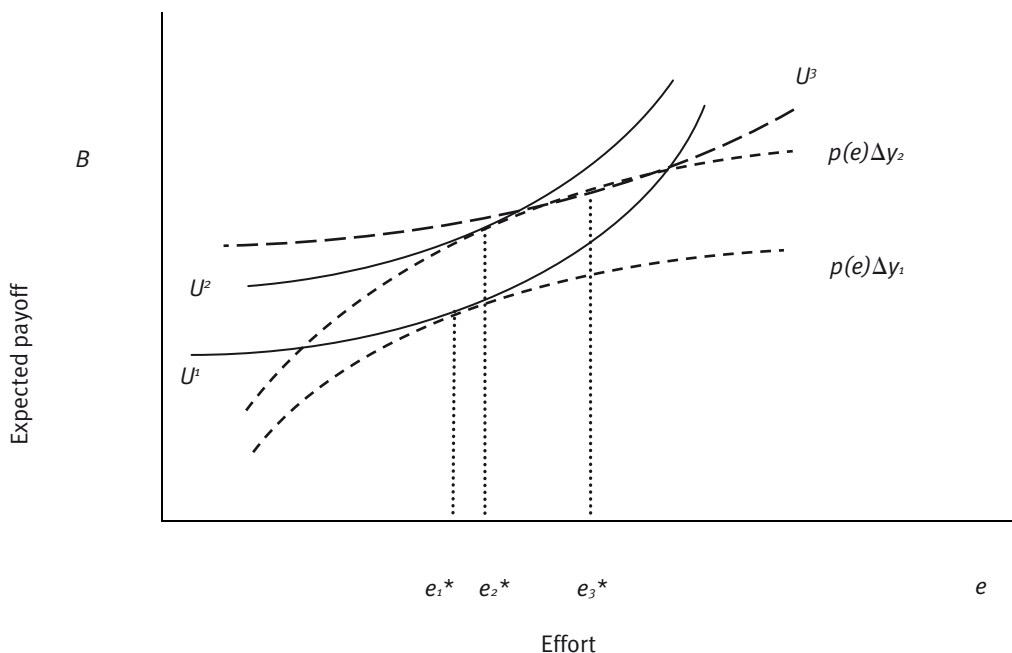
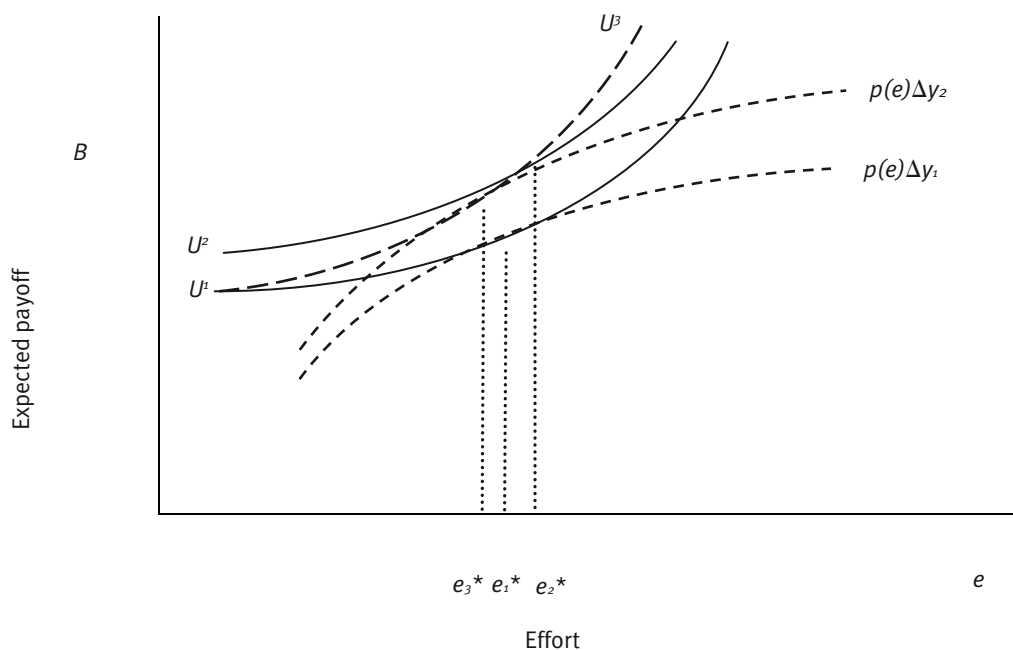


Figure 5: Change in optimal effort with an increase in incentives, crowded-out motivation



4.4 Summary of the section

This section outlines a framework for understanding how changes in incentives, sanctions and programs designed to improve job search effectiveness might affect effort levels by welfare recipients to improve their economic circumstances. The framework emphasised that there could be great heterogeneity in the way individuals respond to changes, since the welfare and taxation parameters they face vary according to their individual circumstances. The framework was used first to show how such changes might affect effort levels where the preferences of individuals do not adapt to the changed circumstances, and then where they may adapt, as the crowding-out theory of intrinsic motivation implies. While the effect of sanctions and changes to incentives on effort are clear in the first case (but often variable across individuals), they can be ambiguous when preferences can change, especially in the face of sanctions and mandatory activities.

5 Empirical welfare reform literature

In this section we summarise the findings of income support receipt reforms, grouping work under four main headings:

- studies of the impact of changes in ‘in-work’ benefits
- impact of mandatory activities and sanctions
- impact of compulsory job search programs and more stringent monitoring
- changes in benefit levels and taper rates.

We are not interested in all aspects of the evaluation of programs to support those on welfare. For example, a common focus of welfare program evaluation literature is on whether education and/or training or job placement programs are the most effective way to get people into continuing employment. This is an important issue, but one not covered by our focus on the role of incentives and the effort levels of individuals to improve their circumstances.

As we deal with the empirical welfare reform literature, our approach is to pick a small number of key studies under each of the four headings listed above and discuss each in detail. We have also selected one key summary study of the relevant literature (where one exists). This is designed to give readers a better idea of the types of initiatives implemented in different countries and representative findings from the key issues analysed. Grogger, Karoly and Klerman (2002) provide a very detailed synthesis of the studies of the impact of welfare reform in North America across a range of outcomes and discuss the trade-offs between outcomes required by some programs.

The studies emphasised in this review use methodologies that provide causal estimates of the impact of programs on welfare recipients. Best practice in this regard are those studies that evaluate programs involving experimental designs. These are programs where individuals are randomised between treatment and control groups, and the program impact is estimated by comparing the outcomes of the two groups. Unfortunately, there are not a lot of programs involving experimental designs, so other non-experimental methods must be used. These methods involve creating artificial control or comparison groups to assess program impact. For example, ‘matching estimators’ compare only those individuals in the group not receiving the treatment who are most like the treated group to estimate program impacts. Regression discontinuity methods can be used where treatment depends on some (almost) arbitrary threshold, so the outcomes of those who receive treatment can be compared with those just on the other side of the eligibility threshold—as though the groups of individuals are identical except for one group being subject to the program. Another approach often used to evaluate the impact of complex programs involving a number of elements is to develop a satisfactory empirical model of the outcome of interest—say exit out of unemployment—and simulate what the impact of a project would have been, given the estimated parameters. Studies using these approaches are emphasised in this review since they are the most likely to provide estimates of the impact of the programs on welfare recipients that can be given a causal interpretation.

5.1 Changes in ‘in-work’ benefits

In this subsection, we review the results of studies analysing in-work benefits in a number of countries—specifically programs in Canada and the United Kingdom. We also summarise one recent, important study and a review of in-work benefit programs in the United States.

Canadian Self Sufficiency Project

An important experimental design welfare change was the Canadian Self Sufficiency Project (SSP). It is described in more detail in Box 1. A research and demonstration project, the SSP ran in a small number of Canadian provinces and was designed to assess a policy innovation that made work pay better than welfare. The experiment started in 1992 and ran for a three-year period. Data were collected on some 6,000 families for up to three years post-intervention to evaluate short and long-term program effects. SSP offered a time-limited earnings supplement to lone parents (largely lone mothers) who were either long-term welfare recipients or recent new welfare applicants. For current welfare recipients, the supplement was a monthly cash payment to those who had been on welfare for at least one year. However, the payments did not begin until the individual was working full time (30 hours a week or more). The supplement was paid on top of earnings from employment for up to three years, as long as the individual continued to work full time and remained off other forms of welfare.

There were three linked research samples in this experiment (in the interests of brevity, research results for the first two samples only are summarised below). These program groups were referred to as the:

- Recipient study (current welfare recipients)
- Applicant study (recent welfare applicants)
- SSP Plus study (long-term welfare recipients who received the supplement, plus an offer of services to help find and keep a job).

Eligible single parents in the study were randomly assigned to one of these program groups or a control group that was not eligible for the earnings supplement. In this section we focus on findings from the recipient and applicant studies only.

Main findings from the research on the Self Sufficiency Project recipient study

The impact of the SSP was measured as the difference in employment, earnings, income and other outcomes between the control and treatment groups.

- SSP increased employment, earnings and income, and reduced welfare use and poverty:
 - those who took up the offer were more likely to find a full-time job
 - those who received supplements reduced their welfare use and increased their earnings (program group members had about \$6,300 more in combined income from earnings).
- The effects of SSP on employment, welfare use and income were small after the supplement stopped—these effects did not persist beyond the life of the project:
 - the effect of SSP was strong during the three years of the experiment
 - by the middle of the fifth year after random assignment, the program and control groups were equally likely to work and earned about the same average income
 - by the sixth year the program and control groups were equally likely to be on welfare.
 - However, it should be noted that program group members and their families may have benefited from increased income during the three years they received the earnings supplement.
- Although the SSP supplement led to an increase in full-time employment, this employment was mostly low wage and of poor quality.
- Primary-school age children of recipients performed better in school than the children of the control group, but there was no effect for older children.
- The SSP cost government agencies more, but society as a whole gained nearly \$2,600 per program group member.

Key studies of the Recipient study: Card & Hyslop 2005; Card & Robins 1996; Michalopoulos et al. 2002; Michalopoulos, Robins & Card 2005.

Box 1: Self Sufficiency Project (Canada)

The Self Sufficiency Project (SSP) was a research and demonstration project designed to test a policy innovation that made work pay better than welfare. The experiment began in 1992 and ran for a three-year period. Data were collected on some 6,000 families for six years to evaluate short and long-term program effects. The project was funded by the Canadian Government and managed by the Social Research and Demonstration Corporation.

Program design

SSP offered a time-limited earnings supplement to lone parents (largely lone mothers) who were either long-term welfare recipients or recent welfare applicants. The supplement was a monthly cash payment to individuals who had been on welfare for at least one year. However, the payments did not commence until the individual was working in a full-time job (30 hours a week or more). At that point, the person left the conventional welfare program (income assistance). The supplement was paid on top of earnings from employment for up to three years, as long as the person continued to work full time and remained off income assistance. The supplement was paid in any month that 30 hours or more were worked per week, and in which there was no recourse to income assistance.

The supplement was calculated to be half the difference between a person's gross labour earnings and a target earnings benchmark. During the first year of the program the benchmark was \$30,000 in New Brunswick and \$37,000 in British Columbia. For example, a participant in British Columbia who worked 35 hours a week at \$7 an hour earned \$12,740 a year. This yielded an earnings supplement of \$12,130 a year $(\$37,000 - \$12,740) / 2$ for a total gross income of \$24,870. If that participant had two children and had remained on income assistance, he/she would have had an annual income of only \$17,111. After accounting for tax obligations and credits, most families had yearly incomes \$3,000 to \$7,000 higher with the supplement than if they had worked the same number of hours without the supplement.

The supplement was therefore similar to a negative income tax, except that it was:

- only available to welfare recipients who could find a full-time job
- paid depending on individual earnings, regardless of family income or other unearned income (for example, rent receipts or child support).

Key features of the Self Sufficiency Project:

- full-time work requirement
- single parents only eligible
- substantial financial incentive for higher work effort—the supplement was designed to provide an immediate pay-off to those who found full-time employment because it could effectively double pre-tax income received from a minimum wage job. In fact, the most generous payments were made to single parents who worked the most months full time and who earned the least while they worked.
- targeted at long-term welfare recipients
- one year to sign up after becoming eligible—if the parent did not sign up within 12 months of becoming eligible, he/she could never receive the supplement
- three years of supplement receipt
- voluntary participation—an alternative to welfare.

Key references: Ford et al. 2003; Michalopoulos et al. 2002.

An important recent study of the SSP is by Bitler, Gelbach and Hoynes (2008), who analysed its effects across the entire distribution of earnings. They analysed the incentives to work more among welfare recipients at different points on a stylised budget constraint, with and without the impact of the SSP. They concluded that theory would predict negative, zero and positive earnings effects, given the incentives people face, depending on where they are on the budget constraint. Indeed Bitler, Gelbach and Hoynes (2008) found heterogeneous program effects consistent with the predictions of both this static labour supply model and those of a dynamic model. They found that the program effects were largest at the top of the distribution while SSP receipt took place and were zero after the subsidy was no longer available.

Main findings from the Self Sufficiency Project Applicant study

The Applicant study reported the same positive effects for employment, welfare receipt and earnings for the program group as the Recipient study. In contrast, however, the effects persisted throughout the follow-up period. This suggests that initiating an ongoing program among those newly applying for assistance will be more beneficial to these potentially better-off individuals than to those who are long-term welfare recipients.

Key studies of the Applicant study: Card, Robins & Lin 1997; Ford et al. 2003; Michalopoulos, Robins & Card 1999.

The Working Families' Tax Credit in the United Kingdom

Brewer and Browne (2006) compared five studies that examined the labour market impact of the Working Families' Tax Credit (WFTC). These include four studies that empirically assessed the impact using differences-in-differences approaches (Blundell, Brewer & Shepard 2005; Francesconi & van der Klaauw 2004; Gregg & Harkness 2003; Leigh 2005), and one that used a structural model of labour supply to simulate the impact of the WFTC compared with the scheme it replaced, the Family Credit (Brewer et al. 2005). They note that a drawback of the differences-in-differences 'natural experiment' methodology for this application is that it cannot evaluate the impact of the WFTC alone on labour market behaviour, since it was introduced around the same time as several other tax and benefit reforms. The WFTC is described in more detail in Box 2. The changes in incentives to work facing families from the WFTC were complex and not all in the same direction.

Labour market participation of lone mothers from the Working Families' Tax Credit

Three of the four studies using differences-in-differences approaches found increases in labour market participation for lone mothers, including an increase in full-time work (more than 30 hours). There were also increases in hours worked—estimates ranged from 1.8 hours a week to 2.5 hours a week; and a change in work hours of 1.2 hours a week.

Labour market participation of adults in couples with children from the Working Families' Tax Credit

Two of the studies found increases in participation among mothers in couples of up to 4.3 percentage points, while the simulation estimated a slight reduction. However, one study also suggested that the WFTC reduced participation among women whose partner worked, and increased it among those whose partner did not work. For men, it reduced participation for those with a working partner by 1.6 percentage points and reduced participation for those without a working partner by 0.3 percentage points. Key studies of the WFTC Study: Brewer et al. (2005, 2006).

Box 2: The Working Families' Tax Credit in the United Kingdom

The Working Families' Tax Credit (WFTC) replaced the Family Credit scheme in October 1999. It is the main form of support for low-income working families with children, and is intended to improve the incentives for low-earning parents to work.

Features of the WFTC:

- ▶ Eligibility: at least one adult in a family with children must work at least 16 hours a week; extra credit is given to those working more than 30 hours. The 'hours rule' is intended to allow for a closer targeting on low wages rather than low earners, but this has created complexities in monitoring and compliance administration.
- ▶ The credit: there is a basic rate for each family, with additional amounts for each child. Once earnings exceed a disregard, these are withdrawn. The phase-out rate is 55 per cent, but as this applies to earnings **after** deductions for income tax and social insurance, a usual overall marginal rate was 69 per cent.
- ▶ The credit is assessed on the joint income of a couple.

Differences between the Working Families' Tax Credit and the system it replaced, the Family Credit:

The WFTC is more generous:

- ▶ higher credits, especially for younger children
- ▶ increase in the amount earned before withdrawal (from £70 a week to £90 a week), with a lower withdrawal rate—Family Credit was 70 per cent and the WFTC is 55 per cent
- ▶ more generous support for formal child care. Under Family Credit only families earning more than the earnings threshold could benefit from support for child care costs. In the WFTC, there is a child care tax credit that provides a 70 per cent subsidy on the costs of child care up to £150 a week, **in addition** to the WFTC.
- ▶ WFTC does not treat child support as income in calculating credit.

There was a change in the payment mechanism:

- ▶ The WFTC is paid through wages, while Family Credit was paid as a cheque from social services.

In sum, the WFTC:

- ▶ increased in-work income for eligible families and increased the number of eligible families
- ▶ reduced the marginal withdrawal rate of those who would have been eligible for Family Credit; but increased the number of workers who faced a tax credit withdrawal as earnings rose on top of income tax and social insurance.

Predictions about effects of the Working Families' Tax Credit on income and incentives to work (Brewer & Browne 2006), based on economic theory:

- ▶ There should be a greater incentive for adults in workless families to work.
- ▶ However, there may be decreased incentives for many potential second (mostly female) adults to work, or remain in the labour market. The extra generosity of the WFTC means that two-worker families would need to work a little less hard to achieve their pre-reform standard of living (an income effect away from work).
- ▶ The lower withdrawal rate could have different effects on adults in different families depending on their income.
 - For those eligible for Family Credit, there would be an increase in the number of hours worked, since there is an increase in returns for each hour worked—a substitution effect **towards** work. But those eligible for the WFTC who earned too much for Family Credit, might experience both an income and a substitution effect **away** from work.

Key references: Brewer & Browne 2006; Brewer et al. 2005, 2006.

Review of in-work benefit programs in the United States

Meyer (1995) reviewed four in-work bonus experiments from the United States. These experiments made payments to unemployment insurance recipients who found jobs quickly and kept them for a particular period of time. The four studies varied considerably on the characteristics of the bonus (amount of payment, period of time allowed to find a job, time to remain in job and so on) and the target population. All studies used random assignment, though the number of treatment conditions differed.

Overall, Meyer (1995) found that the experiments showed that bonuses increase the speed with which people return to work, and that earnings following the bonus are not substantially reduced. However, results were weakened by imprecision. Although these seem like positive results, Meyer argued that the experiments cannot account for the effect of a re-employment bonus on the size of the claimant population. That is, newly unemployed people who plan to return to work soon might not bother filing for unemployment insurance for a short period of time. If, however, there was a bonus for returning to work, filing for unemployment insurance would become much more attractive. This could have the effect of eliminating or reversing any positive effects of a bonus. Finally, the cost-benefit analyses show that a bonus generally led to small net losses for unemployment insurance programs, and were about break-even for broader society.

In a more recent study from the United States, Bitler, Gelbach & Hoynes (2006) analysed the effects across the entire distribution of earnings of the Jobs First waiver rules from a major United States program. The waiver rules involved a tax-free threshold. The authors had access to experimental data on the operation of the program in one US state. Using a stylised budget constraint, they showed that the incentives facing individuals at differing points of the budget constraint varied substantially. They then found that program impacts were broadly consistent with these heterogeneous incentives. The results confirmed the notion that to estimate proper program effects, it is necessary to take into account the differing circumstances individuals find themselves in and the impact of these circumstances on the incentives they face.

5.2 Mandatory activities, sanctions and activity-related benefits

In this subsection, we review the results of two studies that analysed the impact of reforms involving mandatory activities or sanctions in Denmark, two studies from the United States on employment services and two early Australian studies that looked at the introduction of the mutual obligation initiative (MOI) for the unemployed and the Work for the Dole (WFD) scheme.

Denmark

The first study from Denmark assessed the threat effect of participation in an active labour market program (ALMP) on exit from unemployment prior to any program participation (Rosholm & Svarer 2008). In Denmark, unemployed persons are eligible for a benefit for four years. The following system was introduced in Denmark in 1994: a person can participate in an ALMP at any time. However, after one year they had to participate for at least 75 per cent of their remaining time in unemployment. If an offer of program participation from the local employment agency was received (which could happen at any time during the period of unemployment), it had to be accepted. Refusal resulted in loss of benefits. Offers of participation were decided by the local employment agency.

The study was non-experimental. The methodology was a combination of a timing-of-events model with a model for detecting dependencies in a competing risk framework. The individual's hazard rate into program participation provides an estimate of the threat effect. Then, a measure of the perceived risk of activation (to a program) at any point in time was used to explain the hazard rate out of unemployment. Specifically, for each week unemployed, the risk of commencing participation in the next three months was used as a measure of the risk of program participation. If the risk coefficient was positive, it would indicate that perceived risk (rather than actual participation) was positively associated with leaving unemployment more quickly.

While the main focus in this study is on the threat effect, two other effects were also estimated. The first is the ‘lock-in’ effect, which refers to the period of participation in a program. During this time job-search intensity may be lowered because there is less time to search for a job. The second is the ‘post-program’ effect, which refers to the period after participation. If the program itself increased employability, a rise in job-finding rate would be expected.

The threat effect was large and significant. The effect increased up to one year of unemployment and declined to zero shortly thereafter. This might be because those who are still unemployed after one year may be in real need of training and might thus stand to benefit from program participation.

The lock-in effects were moderately small and post-program effects quite large for private sector employment subsidies, suggesting they were quite effective. For temporary public sector jobs there was a larger lock-in effect and a non-significant positive post-program effect. There were large lock-in effects for educational and training programs, but also fairly large positive post-program effects.

The authors estimated effects on duration in two counterfactual situations: the first is a world in which ALMPs exist; that is, there is a threat effect in the calculated outcome; the second a world in which ALMPs do not exist; hence, there was no threat effect.

Three effects were estimated:

- **The effect of program participation in an ALMP system to no program participation in a non-ALMP system (that is, no threat effect).** This represents the total effect of ALMP on duration. Results showed that the total effect of all types of programs reduced duration, compared to a system without ALMPs.
- **The effect of participation compared to non-participation under conditions of threat.** This is the net effect of program participation. Results showed that this pure net effect was only significant for private-sector subsidies; in contrast, education/training and public-sector temporary jobs increased duration. That is, when the threat effect is considered, interpretation of program effects is altered.
- **The threat effect.** The threat effect reduced unemployment by nearly three weeks, indicating that the presence of ALMPs shortened duration even though actual participation in a program did not.

The second paper from Denmark assessed the impact of the introduction of the Youth Unemployment Programme (Jensen, Rosholm and Svarer (2003)). The program is directed towards unemployed, low-educated youth. Under this programme, young people under the age of 25 years, with no formal post-secondary education—who have been unemployed for six of the past nine months—are offered the option of undertaking 18 months of vocational education. However, during this period unemployment benefits are cut by 50 per cent. This creates an incentive for the young people to undertake ordinary education on a public grant or find work. Refusal to participate in the programme results in a total loss of benefits.

Three effects were investigated:

- **Announcement effect:** Those targeted by the program receive written notification four to five months into an unemployment spell. Did those who were at risk of being affected by the program behave differently from those not at risk?
- **Direct program effect:** This effect would be experienced by those who undertook the offered vocational training or who exited into ordinary education. Did the start of the Youth Unemployment Programme affect the transition rate from unemployment to education (ordinary or vocational), or was the vocational offer just a substitute for standard vocational education that youth would have undertaken in any case?
- **Sanction effect:** Did the removal of benefit for not taking up the program affect the transition out of unemployment? The authors noted that both the announcement and direct effects also have a sanction effect implied, so it may not be possible to identify this separate effect of benefit removal.

The methodology was quasi-experimental in that the authors exploited the gradual introduction of the program during 1996 when not all unemployed youth were eligible for participation. Those who were eligible but did not participate formed the control group. The authors estimated a competing risks duration model. The announcement effect was estimated as the difference in baseline hazards for treatments and controls in the first month of observation. The direct effect was estimated as the difference in baseline hazards for treatments and controls in the third month of observation. The sanction effect was estimated as the difference in baseline hazards in the fifth to seventh month of observation.

Overall, the authors found that the transition rate to schooling was increased significantly by the program. Transition to employment effects were weaker. While there was no evidence of an announcement effect there was evidence of a direct program effect and a significant positive effect on the hazard rate from unemployment to schooling in the six to seven-month interval. There was also some evidence of a sanction effect—a strong increase in the baseline hazard to schooling for treatments after month nine, although there were few observations in this group. The findings are consistent with other studies of transitions out of unemployment and duration to benefit exhaustion. That is, unemployed persons exit at increased rates just before their unemployment benefit expires.

The United States

Black, Galdo and Smith (2007) and Black et al. (2003) studied the impact of a social experiment designed to test the effectiveness of a labour market initiative in the United States—Worker Profiling and Reemployment Services (WPRS). The WPRS program was introduced in the United States in 1993. It applies econometric models of ‘expected spell duration or the probability of benefit exhaustion’ to classify individual welfare recipients according to predicted duration of remaining on benefits. Mandatory employment and training services are provided to those with high predicted probabilities.

The papers examined the impact of WPRS on exit from benefits using an experimental methodology. The first paper used a ‘tie-breaking’ experimental design. This exploits the situation that claimants whose profiling scores meet the level for services are only allocated to services if there are places available. For example, only seven out of 10 eligible claimants might be assigned to services. This is the treatment group. The three who are not assigned become the control group. The second paper uses a regression discontinuity approach to compare the outcomes of those surrounding the cut-off point for eligibility.

Two alternative hypotheses for a positive relationship between being assigned to a program and subsequent re-employment were offered. First, if a worker anticipates that services will be effective in augmenting human capital and job search skills, they will remain on welfare to receive these services. In other words, WPRS is a ‘carrot’. Second, if a worker anticipates a significant loss of leisure time associated with the services, the utility of being unemployed will be reduced. This leisure tax is a ‘stick’ that increases motivation to exit benefits.

The outcomes analysed included the number of weeks a claimant receives benefits; the amount of benefits received; and the claimants’ earnings in the quarters following the initiation of the benefits claim.

The main results of the first paper were that the group assigned to receive services exhibited a two-week reduction in benefit receipt relative to the control group, plus a reduction in benefits payments. This reduction was largely due to early exits from the program, and many of these coincided with receipt of letters that notified group members of their obligations. The effects were greatest for those in the ‘mid-range’ of unemployment risk. That is, the program reduced time on benefits most for those who would have spent a moderate amount of time on benefits in the absence of the program, but it had little effect on those who would otherwise have exited early, or who would have persisted longer. The second paper confirms the key direction, magnitude and significance of results of the first, though with an alternative methodology.

Australia

Work for the Dole was part of the mutual obligation initiative (MOI) introduced in Australia in the late 1990s. The Work for the Dole scheme (WFD) is described in more detail in Box 3. Richardson (2002) examined the extent to which the introduction of the mutual obligation initiative (MOI) in Australia induced young people to leave benefits, depending on their history of receipt of income support. As no explicit comparison group existed for this study, the question was addressed using a differences-in-differences estimator within a broad hazard function framework. Since those 25 years of age were too old to be eligible for MOI, pre and post-MOI introduction data was compared for those 23 to 24 years of age (eligible for MOI) and a group of older individuals who might be considered quite like the younger age group in other respects. Richardson (2002) found individuals in the treatment group were more likely to leave benefits within the period after receiving formal notification of MOI requirements and initiation of the activity than those in the comparison group. However, this effect was not large enough to affect the average duration on benefits in the treatment group.

Borland and Tseng (2004) examined the effect of participation in Work for the Dole (WFD) on transitions out of unemployment. Their approach involved non-experimental matching methods. This involved comparing outcomes for a treatment group of welfare recipients who participated in WFD with a matched control group. The aim was to overcome problems of potential selection bias due to:

- heterogeneity in time on benefits at commencement of WFD
- heterogeneity due to the fact that after implementation WFD became one of a ‘menu’ of MOI activities, and tended to attract a higher proportion of participants with poorer predicted employment outcomes.

The estimate of effect of WFD was the ‘average effect of commencing participation in WFD for payment recipients aged 18 to 24 years who commence participation during the “pilot” phase compared to matched payment recipients who do not commence participation in WFD’. Thus, the estimated effect is the average effect of ‘treatment on the treated’. The outcome measures were: incidence of exit from payments by six and 12 months after WFD commencement; incidence of being on payments versus not being on payments nine and 15 months after WFD commencement; and the number of fortnights on payments during the six months and 12 months after WFD commencement.

The overall conclusion of Borland and Tseng (2004) was that there was a significant adverse effect on outcomes of participation in WFD. Bounds analyses showed that for each outcome measure the distribution of possible outcomes was heavily towards adverse WFD effects. The adverse effects were greater in regions with above-median unemployment rates. The adverse effects were significant when participation commenced in weeks 14 to 52 of payment periods, and became worse for later commencements. The effects were slightly worse for females than males.

Borland and Tseng (2004) posited three potential explanations for their results. The first was that there might be a ‘lock-in’ effect of WFD on job search activity: participants may reduce their job search during WFD because a) they perceive the program as work, and hence stop seeking work, b) the time available to seek work is reduced. Thus, search activity is substituted during participation; while it may increase after the program finishes, the current findings suggest there were some permanent scarring/negative effects for participants relative to the control group. Second, there might be stigma effects if potential employers regard WFD as a negative factor. Third, the scale of intervention was modest. Work for the Dole activities generally did not include training (just some type of work experience) so its effect on the human capital of recipients was therefore likely to be small.

Box 3: Work for the Dole and mutual obligation in Australia

The evaluations summarised (Borland & Tseng 2004; Richardson 2002) both report from the initial pilot period of the mutual obligation initiative (MOI), commencing 1 July 1998. The description given here reflects the program design at that time.

The target population for the Work for the Dole (WFD) scheme was unemployed young people aged 18 to 24 years who had been receiving income support (Newstart or Youth Allowance) for a continuous period of at least six months. Job seekers were notified of their obligation between the 12th and 15th fortnight of a spell of benefit receipt, with activity requirements finalised at interview about two weeks later. Participation was mandatory—refusal could result in benefits being cut off.

There were a number of eligible MOI activities:

- ▶ part-time paid work: 12 hours per week for at least seven of 13 fortnights
- ▶ voluntary work: 12 hours per week for at least seven of 13 fortnights
- ▶ education or training: six hours per week course contact for a full semester
- ▶ job placement, employment and training: completion of program required
- ▶ WFD: 26 to 30 hours per fortnight for up to six months
- ▶ job search training and intensive job search: three weeks job search training, then twice normal employer contacts (minimum eight) for seven fortnights
- ▶ intensive assistance: up to two years individualised training and support
- ▶ relocation and intensive job search: to low unemployment or high demand for a particular skills area, then an intensive job search for seven fortnights.

After July 1999, MOI activities became an annual requirement for eligible job seekers on full payment.

The objectives of WFD were to provide opportunities for unemployed people to:

- ▶ gain work experience
- ▶ build networks
- ▶ improve self-esteem, communication skills and motivation
- ▶ improve work habits
- ▶ contribute to projects that are of value to the community.

Participation in WFD was required for a maximum of six months; working for six hours per day for two days a week if aged 18 to 20 years, six hours per day for 2.5 days a week if aged 21 to 24 years. Participants received a WFD supplement of \$20 a fortnight to assist with working costs.

WFD services were delivered through community or government organisations or agencies. There were 174 projects during the pilot phase, including environment work such as tree planting, construction projects such as building cycle tracks, maintenance of community facilities, administrative work in hospitals and the aged care sector, and meals on wheels delivery.

Key references: Borland & Tseng 2004; Richardson 2002.

5.3 Monitoring, counselling and job search programs

In this subsection, we review the results of a Dutch study that analysed the impact of monitoring and counselling on exits from unemployment and summarised estimates of the impact of job search assistance in the Canadian SSP project among long-term welfare recipients. This subsection also discusses a number of reviews of this literature.

van den Berg and van der Klauuw (2001) examined the impact of two ALMP policies in the Netherlands—counselling and monitoring—on the duration of unemployment and the amount of unemployment benefit received. Of additional interest is how counselling and monitoring may affect the channels or methods through which an individual searches for work. These channels include formal methods (such as responding to job ads), sending letters, and informal channels (such as receiving job offers or referrals from friends and family).

At the time, to be entitled to benefits in the Netherlands, the unemployed worker had these obligations: (1) prevent unnecessary job loss; (2) take actions to prevent them becoming unemployed; (3) keep the local employment office informed about everything relevant to the payment of benefits. If these obligations were not met, the local office had the discretion to apply a sanction.

Newly unemployed workers were classified according to a range of individual and employment characteristics and experiences. ‘Type 1’ individuals were expected to have sufficient skills to get a job. From 1998, counselling and monitoring was targeted at Type 1 workers. Counselling and monitoring was a requirement additional to the reports of search activities that had to be sent in every week. The first counselling interview took place three days after the first unemployment benefit payment. This was followed by monthly meetings for six months. During these meetings, job search activities were evaluated and plans for the next period of job search were made. Individuals who did not comply with planning could be punished by a reduction in benefits.

The methodology involved a randomised design of subjects at two local employment branches in different cities. At each branch, half the eligible participants were randomly allocated into treatment and control groups. Those in the treatment group were required to show up at the interview in three days, while those in the control group simply continued to send in written reports of job search activities as normal. Participants were unaware that they were in the study. The effect on exit to work was estimated with duration and limited-dependent variable models, using both parametric and non-parametric methods.

van den Berg and van der Klauuw (2001) found that the exit rate to employment did not depend on counselling and monitoring. Theoretically, if counselling was effective, exit would increase because effectiveness of search would improve. Survey evidence from participants, however, confirmed that the counselling component did not actually include much job search assistance. Instead, counselling and monitoring interviews consisted mostly of ‘controlling’ activities, such as checking on the number of applications made, rather than ‘advisory’ activities, such as making suggestions about job search.

However, monitoring changed the ways in which participants searched for work, with a shift from informal to formal methods. However, the net effect on the exit rate was zero. The authors suggest that the monitoring component was inefficient because ‘the resulting behaviour is sub-optimal from the individual’s point of view, while the exit rate to work does not change’. This may well have been because labour market conditions at the time of the study were relatively good, and informal channels become more important if labour prospects are good; or the sample had the best labour market prospects among the population of unemployed individuals.

Based on a review of empirical evidence on monitoring and counselling services, van den Berg and van der Klauuw (2001, pp. 34–36) concluded that low-intensity job search assistance programs—like the counselling component of the present study—were of little use. In contrast, other research shows that high-intensity programs have a positive impact on exit rate to work. Second, the monitoring of individuals with good labour market prospects under favourable macroeconomic conditions is inefficient and simply leads to substitution of search methods. On the other hand, workers with worse prospects (either individual or macroeconomic) have less scope for substitution, so in their case monitoring may increase the exit rate to work.

As noted in the discussion of the Canadian SSP study, one element was the SSP Plus study of long-term welfare recipients who received a supplement, plus an offer of services to help them find and keep a job. Although many in the SSP Plus study who found work after taking up this offer lost their jobs quickly, there was a more positive effect on employment and earnings for this group towards the end of the evaluation period, suggesting that the services may have helped these welfare recipients find more stable employment (Lei & Michalopoulos 2001; Zabel, Schwartz & Donald 2006).

Two Australian studies have analysed the impact of randomised trials of counselling and job search in Australia for two different groups of income support recipients. Breunig et al. (2003) looked at the impact of these services on the very long-term unemployed (unemployed for five years or more), while Cobb-Clark, Ryan and Breunig (2006) looked at the impact of these services on women in workless families. Both Breunig et al. (2003) and Cobb-Clark, Ryan & Breunig (2006) found increased economic activity among both the intervention and control groups. For the control group this took the form of increased participation in paid work, whereas those in the intervention group increased their participation in education and training while reducing hours of paid employment. Overall differences between the groups were small. The conclusion was that such interventions are probably less effective for individuals who are already quite disadvantaged and entrenched in unemployment in terms of their paid work participation. Members of both groups received letters about their involvement in the scheme. These letters were intended to convey that participation was mandatory or receipt of income support would be terminated.

Blundell et al. (2004) analysed the impact of a mandatory job search program for young people in the United Kingdom. They evaluated the impact of the program using a before-and-after design and a matched comparison group. They found the program raised transition to employment by about five percentage points, but the effects were larger in the first quarter after introduction rather than in later quarters, raising the question of long-term effectiveness.

Meyer (1995) reviewed six job search experiments from the United States that evaluated different combinations of two categories—improved job finding services and increased enforcement of job search requirements conditional on continued receipt of unemployment insurance. Treatments in the first category included enhanced placement interviews, intensive work assistance and training workshops, and one-on-one mentoring sessions. Examples of enforcement treatments included required reporting, monitoring of effort and increased eligibility checks. While treatment design and target populations differed across studies, all used random assignment. Meyer's overall assessment of the results of the job search experiments were more positive than those of the in-work benefit experiments he also studied. Nearly all of the job search experiments reduced unemployment insurance receipt, increased earnings and were cost-effective. Although it was clear that the combined measures (which differed across studies) were effective, it was more difficult to disentangle the specific effects of increased services versus increased enforcement. Meyer concluded that 'the bottom line is that a wide range of approaches seems to be successful' (p. 120). Nonetheless, Meyer argued that a key advantage of job search programs over bonuses is that they are less likely to increase entry into the pool of unemployment insurance claimants because there is no increased incentive to file a benefit claim.

van den Berg and van der Klaauw (2005) reviewed the literature on how monitoring and sanctions affect job search and exits from unemployment. Part of their interest was on the effect of monitoring on formal and informal search channels (which are impossible for employment agencies to observe). The authors' theoretical model suggested that monitoring decreases informal job search effort, and that the corresponding increase in formal effort may not be enough to counter an overall negative effect. Thus, monitoring was more likely to increase re-employment if the informal channel was relatively unimportant compared to the formal. The authors argued that since studies show that individuals who have less favourable labour market prospects generally do not have access to informal channels, for this group, monitoring may be effective. For those with more favourable options, monitoring may in fact decrease re-employment. The authors concluded that monitoring is not always a good strategy, depending on the targeted population and the prevailing economic conditions. They also concluded that imposition of a sanction has a positive effect, indicating that unemployed individuals are responsive to monetary incentives.

5.4 Increases and decreases in benefits and changes in clawback parameters

In this subsection, we review the results of two studies that analysed the impact of changes in the magnitude of benefits paid to welfare recipients in Sweden and one Australian study that looked at the complex set of effects changes to clawback and taxation rates can have for the work incentives facing individuals.

The two Swedish studies examined, separately, the impact of decreases (Carling, Holmlund & Vejsiu 2001) and increases (Benmarker, Carling & Holmlund 2007) in unemployment benefits. The decreases took place in the mid-1990s and the increases after 2002. Neither change affected all unemployed individuals, so it was possible to use those for whom benefits did not change as a control group. The results of the two studies were not entirely consistent. The reduction in benefit had a positive effect on the transition rate from unemployment to employment, and were not significantly different for men and women. The effect was a 10 per cent increase in the exit rate. In contrast, the study looking at the increase in benefits could not confirm that there were adverse effects on unemployment duration, with evidence suggesting that the reforms had the opposite effects for men and women. Specifically, there was strong evidence that unemployment duration increased for men, but fell for women. The authors suggested that concurrent changes to the child care benefit system might have been responsible for the finding that female unemployment duration declined after reforms that made the benefit system more generous. Other aspects of the operation of active labour market programs (ALMPs) in Sweden in the relevant period are summarised in Box 4.

Gregory, Klug and Thapa (2008) examined the income and benefit receipt consequences for lone mothers of changes to the Australian tax system introduced in 2000. Among other changes, the taper rate (or clawback parameter) was decreased for those on income support. A second policy decision also decreased the taper rate for family payments. The effects of these changes on income, incentives to work and employment outcomes were analysed by the authors, who focused on three main issues. First, what was the effect of reduced tapers on welfare program eligibility? Reduced taper rates have the effect of making some previously ineligible individuals become eligible. Second, what was the 'knock-on' effect between programs, since the reduction of taper for income support led to a subsequent decision to also reduce the taper for family payments so they did not overlap? Third, what were the 'knock-on' effects where changes to the first program (income support) also affected eligibility for the second program (family payments)? The authors were concerned that these program interactions would produce outcomes where the largest income gains were delivered to those with lower effective marginal tax rates and higher incomes.

The first main finding for the effect of the total reform on income and the effective marginal tax rate was that income tax liabilities were increased for lone mothers (not an intended consequence of the reform package). This was caused by increases in income tax arising from the increased gross pension increase, and the removal of the sole parent rebate. The second main finding was that tax increases removed much of the direct gains from income support taper reductions. The third finding was that the average disposable income increased by around \$35 for those who had been eligible for welfare before the reform. The fourth finding was that the largest increases in income went to the newly eligible income support groups through higher levels of non-taxable family payments produced by the knock-on and taper effects. The fifth finding was that the largest income gains went largely to the even higher income groups who were ineligible for income support. This was due to the large increase in discretionary family payments. In summary, the whole package of reform favoured those with higher incomes.

The main finding for the effect of the total reform on incentives to work was that, overall, there was no improvement in work incentives because the direct effect of the income support taper reduction was small and largely offset by income tax increases.

Box 4: Active Labour Market Programs in Sweden during the 1990s

The Swedish labour market policy has two main, integrated components: six different active labour market programs (ALMPs) and an unemployment benefit system. The six programs are similar to those provided in other Organisation for Economic Co-operation and Development (OECD) countries, and include labour market training, workplace introduction, work experience placement, relief work, trainee replacement and job subsidies.

The unemployment benefit

There are two types of unemployment benefit in Sweden. Unemployment insurance provides up to 80 per cent of the individual's salary in the previous job, up to a ceiling. It is available for a total of 60 weeks. To be eligible, a person needs to be actively seeking work and be registered at an employment office. They must have worked for a minimum of 80 days over five calendar months during the previous 12 months. The second type of unemployment benefit is called KAS. It is mostly aimed at new entrants into the labour market, and only pays about half as much as unemployment insurance. Eligibility to unemployment insurance or KAS can be renewed by an additional 80 days of work over five calendar months, or through participation in a labour market program. Although this was changed in 2001, in the 1990s it was possible to extend time on benefit indefinitely.

Program eligibility

Some programs are targeted at specific groups of unemployed, as noted below under 'Program features' below. Overall, to be eligible a person must be registered at an employment office. Programs are ongoing and available at any time in an unemployment spell, so that most people join one eventually if they remain unemployed long enough. Once unemployed, a person and their case worker make decisions about program participation (or not) over the period of unemployment. Once an offer of a suitable job a program placement is made, however, it must be accepted. Refusal to accept could lead to cancellation of unemployment insurance payments.

Program features

Labour market training is offered to unemployed individuals aged 20 years or older. It consists of full-time classroom education with the aim of equipping individuals with the vocational skills required to find a job quickly. This is the most expensive of the Swedish programs.

Work experience placement and **workplace introduction** both involve workplace experience, with the aim of maintaining and enhancing contact with working life and habits, and gaining good references and experience. Work experience placement can involve any sort of activity, but most commonly administration and construction activities. It was introduced in 1993 during a recession and was intended to prevent people from exhausting their benefits. Workplace introduction offers unemployed individuals a period of workplace training, with a strong emphasis on practical vocational training.

Relief work and **trainee replacement schemes** involve temporary jobs. **Relief work** consists of specially created temporary jobs, mostly in the public sector. Payment is by collective agreement. It is aimed at persons aged over 25 years. One of its functions is to provide a job to those in danger of exhausting their benefit. It declined in popularity throughout the 1990s. **Trainee replacement schemes** are for a person who replaces a regular employee who has taken leave for education. Thus, this program provides an opportunity for an unemployed person to gain job-specific experience while allowing firms to update employee skills.

Job subsidies offer a temporarily subsidised job in the private sector. The aim is to provide job-specific human capital.

Key references: Adda et al. (2007); Sianesi (2004, 2008).

The authors found that since the largest income increases and strongest incentive effects were due to family payments, the largest increases in income and work incentives went to lone mothers with large numbers of dependent children. However, this group was the least likely to be able to access these increases by working.

Gregory, Klug and Thapa (2008) studied the characteristics of lone mothers advantaged by the reform. The taper reforms had the effect of increasing the pool of people who were eligible for welfare. Most of this increase appeared to be due to inside inflows, or those previously on support, and after the reforms remained on support, but who increased their earnings and moved into the new income support eligible group. Those who were newly eligible also had histories of welfare support. This shows that the taper changes, by increasing the eligible range of income, primarily extended time spent on support for those already receiving it, as well as returning to the system some who had previously managed to make their way off income support. The analysis confirms the importance of looking at the specific incentives facing individual recipients, given their circumstances, and as emphasised in the section setting out our conceptual framework, rather than relying on analysis at too high a level of abstraction.

5.5 Summary of the section

Empirical research on the impact of welfare reform confirms that the individual circumstances of welfare recipients subject to reform matter a great deal in understanding their responses. Mean effects over a population may mask quite different responses from groups of individuals whose circumstances and incentives differ. Programs providing forms of in-work benefits seem to have a positive impact on participation and employment outcomes, though the effects may be small. Mandatory activities, in the form of requiring welfare recipients to undertake specified activities in return for continued receipt of benefits, are typically successful—individuals tend to undertake the activities. However, individuals substitute these activities for others that may also have been beneficial for the outcomes of interest. Hence, the overall impact on outcomes may not be positive. Job search programs are a case in point. Where individuals are required to undertake specific forms of job search, they may substitute formal job search for informal job search. In many studies, it seems the short-term effects of programs are very often larger than the long-term effects.

6 Conclusions and implications

This report summarises the literature on how individuals receiving government income support change their behaviour when faced with new incentives or requirements placed upon them by the government.

Incentives are usually assumed to improve performance within principal–agent relationships. However, experimental studies in psychology and economics have shown that incentives do not always improve performance. Sometimes they actually reduce it in comparison to no incentive at all.

Several theoretical explanations for these effects have been suggested, but the principal one is the crowding out of intrinsic motivation. According to this perspective, the introduction of an incentive might encourage extrinsic motivation for a task at the cost of intrinsic motivation.

We provide a conceptual framework for understanding how changes in incentives, sanctions and programs to improve job search effectiveness might affect effort levels by welfare recipients to improve their economic circumstances.

The framework was used first to show how changes in incentives might affect effort levels where the preferences of individuals do not adapt to the changed circumstances, and then where they may adapt, as the crowding-out theory of intrinsic motivation implies. While the effect of sanctions and changes to incentives on effort are clear in the first case (but often variable across individuals), they can be ambiguous when preferences can change—as the crowding-out theory implies—especially in the face of sanctions and mandatory activities.

The framework emphasises that there can be great heterogeneity in the way individuals respond to changes, since the specific incentives they face differ. This is because the welfare and taxation parameters they face vary according to their individual circumstances. Therefore, the change in their incentives from some reform may vary substantially.

Empirical research on the impact of welfare reform confirms that the individual circumstances of welfare recipients who are subject to reform matter a great deal in understanding their responses. Mean effects over a population may mask quite different responses from groups whose circumstances and incentives differ. This literature on effects across the entire distribution of interest (earnings or hours) is just really developing, though it has been acknowledged by analysts in the past that first and second earners often face very different work incentives from taxation and welfare reform measures. A sounder understanding of these differences in incentives and consequent heterogeneity across the distribution in effects may help us better understand the sometimes inconsistent estimates across studies.

Studies suggest that programs providing forms of in-work benefits have a positive impact on participation and employment outcomes, though the effects may be small. Mandatory activities, in the form of requiring welfare recipients to undertake specified activities in return for continued receipt of benefits, are typically successful—individuals tend to undertake those activities. However, individuals substitute them for other activities that may also have been beneficial for the outcomes of interest. Hence, the overall impact on outcomes may not be positive. Job search programs are a case in point. Where individuals are required to undertake specific forms of job search, they may substitute formal job search for informal forms. In many studies, it seems the short-term effects of programs are very often larger than the longer-term ones they provide. Whether this is evidence of depreciation in skills acquired, the impact of cyclical factors on groups who remain especially vulnerable despite a recent history of employment or the consistency of social norms and their impact on individuals over time remains unclear, though of considerable interest in an economic downturn.

List of shortened forms

ALMP	active labour market program
EPLOC	external perceived locus of causality
MOI	mutual obligation initiative
SSP	Self Sufficiency Project
WFD	Work for the Dole
WFTC	Working Families' Tax Credit
WPRS	Worker Profiling and Reemployment Services

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Occasional Papers

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