Case study 8.1 How incentives make the world go round

Summary

This case study describes examples of behaviour responding to incentives – that is, changes to the benefits and/or costs associated with alternative choices. Changes to the cost and benefits of whether we have paid work, how hard we work in our jobs, and different ways of spending our money are shown to have affected behaviour.

Suggested answers

1 What are examples of how your own behaviour is influenced by incentives?

Think about examples such as how you allocate your time between alternative activities such as study, part-time work, sport and socialising; how you decide where to go on holidays; or whether to do an Honours year or a postgraduate degree.

2 In 1995 FIFA made a major change to the system for allocating points to soccer teams that would determine their finishing positions in league competitions such as the EPL and La Liga. Previously teams were awarded 2 points for winning a match, 1 point for a draw, and zero points for a loss. Subsequently teams winning a match were awarded 3 points, and the points for a draw and loss were unchanged.

How do you think that the rule change made by FIFA affected the incentives for attacking play and defensive play – and how might that effect have varied depending on the game score? Can you make a prediction of how the rule change would affect the distribution of final scores (for example, game is drawn versus one-goal winning margin to a team)?

The new points system raises the size of the gain from winning compared to drawing a match. This would be expected to have two effects: (a) When a match was level (for example, 1–1, 2–2) there would be a greater incentive for teams to adopt attacking play to seek to win the match; and (b) When a team is ahead in a match it has greater incentive to adopt defensive play in order to seek to retain its lead.

Both of these effects would be predicted to affect the distribution of final scores in the same way – making it less likely that a match would be drawn and more likely that it would be decided by a small margin (such as 2–1 or 3–2 etc.). These predictions have been confirmed in research by the game theorists Ignacio Palacios-Huerta and Luis Garicano. They compared outcomes in matches played in a season of La Liga before the FIFA rule change and a season after the rule change. Their results showed that the share of matches that was drawn fell by five percentage points after the rule change, and the share of matches won by a one-goal margin increased by about the same amount.

3 Do you think that monetary incentives can always be successful in motivating behaviour? What might be some limitations or disadvantages to providing monetary incentives?

There are different forms of incentives. While monetary incentives may induce people to act in a way we desire, it is important to be aware that other non-monetary motivation may be an equally important source of incentives. For example, are you trying to do your best in tutoring just because you want to be able to keep earning money from this job, or because of the intrinsic satisfaction you get from feeling you have done a good job and helped students to learn? Sometimes, providing monetary incentives may even have an adverse effect on overall incentives. For example, Richard Layard quotes the following example in his recent book Happiness (2005, p. 159):

‘… the psychologist Edward Deci gave puzzles to two groups of students. One group he paid for each correct solution, the other he did not. After time was up, both groups were allowed to go on working. The unpaid group did much more extra work – owing to their intrinsic interest in the exercise. But for the group that had been paid, the external motivation had reduced the internal motivation that would otherwise have existed. They did half as much additional work on the puzzles.’

4 Recently there has been much discussion about whether some part of teachers’ pay should be related to performance. The Commonwealth Government has proposed a trial of a national pay system that would involve teachers’ pay varying with student performance on tests ‘as a motivator to achieve specific results’ (Lisa Martin, 2007, ‘A question of merit’, The Age, June 25, Education p. 16). Can the idea of introducing performance pay be related to the idea of incentives? What do you think are likely to be the strengths and weaknesses of such a scheme?

If teachers’ pay were to vary with student performance on tests, the marginal benefit to teachers of having their students perform well on those tests would increase; hence the intention is to provide an incentive for teachers to devote extra attention and resources to having students perform well on the tests.

A strength of the scheme is that by giving teachers an incentive to improve student performance on the tests, it will improve student learning of the core knowledge and skills that are required to do well on the tests. Some possible weaknesses of the scheme are that:

i the monetary payments may not affect teachers’ incentives (see discussion of extrinsic and intrinsic motivation in question 2)

ii there may be perverse effects on incentives. Rather than seeking to improve students’ test performance by improving their learning, other means (such as helping students to cheat on the tests) might be used (see for example the discussion in chapter 1 of Freakonomics), or teachers may end up focusing too much on the narrow set of knowledge or skills that is examined in the tests.