Case study 1.4 Do incentives really matter: can economic policy change the timing of births and deaths?

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 It has been reported that in some cities in Brazil there are large populations of rats that pose a significant public health problem. A proposed solution is to pay a bounty per kilogram of dead rats brought into city authorities by members of the population in these cities. Would providing monetary incentives assist the government to solve the problem of excessive number of rats?

The policy is well-intended, seeking to provide incentives for the population to take actions to reduce the rat populations. But there might also be some perverse effects that were not intended. Because the payment for dead rats was such a large amount compared to average household income, many households actually started breeding rats. Having people hunting for rats could also be considered likely to cause a public health problem.

2 There have been growing reports of ‘cheating’ during National Assessment Program – Literacy and Numeracy (NAPLAN) testing in Australia. The 2018 Report on NAPLAN Test Incidents revealed 68 test incidents including one of cheating where teachers changed students’ answers and 20 substantiated security breaches that included instances of opening test materials earlier than allowed and test materials not being kept secure during the test security period (Australian Curriculum Assessment and Reporting Authority, 2019).

a Could you regard schools seeking to manipulate their students’ test results as an effect on incentives that was unintended when the Australian Government introduced NAPLAN?

Yes. The government was intending that the tests would provide information on students’ skills in literacy and numeracy, which would be available to their parents as an indication of their academic achievement and progress; and which could be aggregated to provide a measure of the average skills of students at individual schools. The tests become less valid as a source of this information when schools take actions that manipulate students’ test results. Hence, it is possible to infer, from the objective that the government has for the NAPLAN tests, that it did not expect this type of manipulation by schools to occur. Therefore, any manipulation by schools can be interpreted as an unintended consequence of setting up the NAPLAN tests.

b How do you think this type of behaviour is likely to be affected as students’ performances on NAPLAN tests becomes a more important way to assess school quality?

If NAPLAN tests become a more important way to judge school quality, it follows that the benefits to a school of cheating to improve the scores of its students will be increased. Hence, in the absence of any change in the costs of cheating, we would predict an increase in the incidence of cheating.

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.’