Clarifying the nature of the Heckman Curve

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Abstract

In response to our paper, James Heckman states that the Heckman Curve does not describe how the average return on investment of programs differs by the age of recipients. This clarification is useful as many people in the policy community have understood the Heckman Curve in this manner.

Keywords: Heckman Curve; benefit cost analysis; program evaluation, skill formation, internal rate of return

In our paper we interpreted the Heckman Curve as a proposition that (a) social policy interventions targeted at early childhood would generate benefit cost ratios that were higher than other age groups, and (b) interventions targeted at older age groups would often have benefits smaller than their costs (Rea and Burton, 2020).

Our characterisation of the Heckman Curve was based on the paper by James Heckman entitled 'Skill formation and the economics of investing in disadvantaged children'. This was published in Science in 2006 and stated that 'early interventions targeted toward disadvantaged children have much higher returns than later interventions such as reduced pupil teacher ratios, public job training, convict rehabilitation programs, tuition subsidies, or expenditure on police. At current levels of resources, society overinvests in remedial skill investments at later ages and underinvests in the early years' (Heckman, 2006 p1902).

The natural interpretation of the quoted statement is that Professor Heckman was discussing interventions, investments in human capital, and was advising decision-makers inside and outside government to target investments in a particular way.

The empirical component of our paper used a dataset of benefit cost ratios estimated by the Washington State Institute for Public Policy. Analysis of the dataset showed no readily apparent relationship between the estimated benefit cost ratios of interventions and the age of recipients.

The policy conclusion we draw from our analysis is that age is not a short-cut for identifying where governments should, or should not, invest. There are many well studied interventions for children that are worthy candidates for public funding based on efficiency considerations. However, the same is also true of many interventions targeting youth and older people. A number of early intervention programs have been shown to be cost-effective, as have a range of 'remedial' or 'second chance' programs targeting older individuals. Good public policy requires a case-by-case assessment of the evidence and benefit cost analysis for each intervention being considered.

In his comment on our paper, Heckman states that we have misinterpreted the Heckman Curve (Heckman, 2020). He states that it is not a proposition about how the average return on investment of programs differs by the age of recipients. We welcome this clarification and believe it is a useful outcome of the exchange between us. Many people including ourselves have previously understood the Heckman Curve to be advice on public investment in human capital programmes. It is helpful to understand that his work in this area is not meant to be relevant to public investment decisions in the manner we describe.

References

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