

“Observable utility” as a generalization of GDP outside the consumer-firm model

Abhimanyu Pallavi Sudhir

Abstract The Gross Domestic Product (GDP) is a popular proxy for aggregate welfare in many practical settings. However, a theoretical inadequacy of GDP is that its definition rests on the notion of a “final good”, and as a result is only well-defined within what we call the consumer-firm model of economics. In this paper, we proposed a new metric of welfare, that we term “observable utility”, which is defined in a more general context. We prove some basic results about the validity of this metric, and demonstrate that it acts as a natural generalization of GDP, noting the conditions under which it reduces to the latter.

1 Declarations

1.1 Funding

Not applicable.

1.2 Competing interests

Not applicable.

1.3 Availability of data and material

Not applicable.

1.4 Code availability

Not applicable.

Department of Mathematics, Imperial College, London, United Kingdom.
E-mail: ap6218@ic.ac.uk
ORCID: 0000-0002-2506-0515