

Imagine a young couple decides about how many kids to have. They consider their preferred number of children, the uncertainty about how lovable each of them would be and the objective conditions such as access to child care facilities, working time flexibility, earnings, size of their dwelling, etc. Then suddenly, the government announces that every couple that wants to have their preferred number of children – whatever the number – is given a huge house for living, free of charge, monthly subsidy to cover all the costs, a private nanny and private helicopter to commute to work.

It is customary in economic literature to first estimate preferences and then simulate the effects of policies, assuming that preferences do not change. We infer about the preferred number of children from the one a family chose under the old circumstance and then check how happy a given family would be *with the same preferences* but with the new circumstances. Obviously, this is a far-fetched assumption, that need not be realistic.

The problem is that we do not have a good way to check individual preferences in every state of the world. Or do we? Derivative instruments inform about the state-space of potential outcomes and the probability assigned by all market participants. If markets are sufficiently financialized (insurance is possible), derivative prices reveal what we think about the future – not about the past. Then we can try to use derivative prices of assets – e.g. a derivative on GDP – to infer about the preferences between all kinds of the parallel words.