

'The Genericity of Beliefs-Determine-Preferences Models Revisited' by Chen Yi-Chun and Siyang Xiong, Journal of Economic Theory

In this paper Yi-Chun CHEN (Economics) and Xiong re-cast doubt on the value of the current economic modeling of institution design that posits, contrary to common sense, "most of the time" private information does not afford an individual the opportunity to capitalize on information known only to the holder. This finding has wide-reaching implications for the study and application of virtually all mechanism design models in economics including trade, auction, and public good provision.

An area of long debate in economics is whether private information (information privy only to the one having it) confers economic rent - returns in excess of the norm - to those who possess it. In this paper, the authors disproved a recent study [P. Barelli 'On the genericity of full surplus extraction in mechanism design' J. Econ. Theory 144 (2009) 1320–1332] that generically among all information structures, economic rent could be possessed with two or more privately-informed players. In other words, full surplus extraction (FSE) by principals may still be possible for most information structures. An example is in an auction whereby the seller (principal) is able to design it such that he is able to capture the full surplus of any number of privately-informed bidders (players).

Making use of a suitably modified notion of beliefs-determine-preferences (BDP) property, which means that in a model, distinct types of a player have different beliefs, the authors showed that, contrary to Barelli's conclusion that non-BDP models are generic, which implies that FSE is impossible in most models, BDP models are, in fact, generic.

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