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Structural Estimation  
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### **On the Structural v Experimentalists Approaches in Economics**

I will confess, first, to a fairly thorough ignorance of structural estimation (or, structural economics, however the practice is identified). I will confess further that I formerly held the exact same views denigrated by Keane & Rust: that structural economics is the ‘bad economics’ that the causal revolution left behind. So, Keane and Rust’s spirited defenses of structural estimation provided some necessary corrections of my thinking (some of Rust’s jabs at Levitt, although funny, seemed unnecessarily petty and mean-spirited). In light of this, I’ll try to summarize their arguments with as little mischaracterization as possible.

I think the core argument that nags at both Keane and Rust is this: somehow, economists have assumed as dogma that structural approach is incredible because it makes a laundry list of assumptions and is therefore bad social science; the rivalrous experimentalist approach free of a priori assumptions, and is thus good social science. As I remember it, Keane and Rust refute this argument in two main ways:

- (a) *We (structuralists) make assumptions sure but, they (experimentalists) make assumptions too.*
- (b) *They (experimentalists) have a collection of ‘facts’; we (structuralists) have a project here.*

The first is straightforward. They begin by pointing out that it is *not* true that experimentalists approach are free of a priori assumptions. Keane breaks down Angrist’s seminal paper on draft lotteries to show that assumptions that are in order for the casual effect to be identified. The experimentalists make *implicit* assumptions that are often just as unrealistic as ours, he seems to say; we might make *more* of them but we’re explicit and careful about them. Where Keane is weaker, I think, is in his presumption that all assumptions are equal somehow, or that the fact that the assumption perch atop which structuralist approaches (built on cascading assumptions, such as my understanding) stand are more or less comparable to the mounds experimental approaches sit atop. Rust makes a clearer argument here. He points out that assumptions made by experimentalists are often of a qualitative, non-parametric make; the assumptions made by structuralists tend to be of a parametric make. Why is it that assumptions of non-confoundedness get hand-waved away while assumptions over the functional form of a utility function get endlessly argued over? Rust poses the question rhetorically, but I think there might be good and strong reasons why non-parametric assumptions are acceptable where parametric ones aren’t.

The second is that structural economics emerged out of a desire to better match standing economic theories to observations of the empirical world. It comes from a desire to understand the world in a disciplined, coherent way. It asks questions with an aim in mind. With

experimentalists, it seems that we're often left with a bricolage with contestable 'facts': whatever are we even supposed with it?