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Henrik Jensen
*Department of Economics*
*University of Copenhagen*
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**[Notes 3]**
**General questions about Lucas' misperceptions model**

Q I couldn't find a realistic interpretation of the islands in the Lucas model. For example, can we take different sectors (as different islands) in an economy where agents in each sector misperceive shocks to their sector as aggregate shocks (or vice versa)? What do the islands actually represent? What interpretation can we have for looking at the economy as a collection of islands?

A You indeed point to a very good interpretation of the islands: *sectors*. The Lucas set-up is just an extreme modelling device, made up to capture the realistic fact that some economic decisions are made out of "local" concerns (e.g., your own wage), and some are made out of concern for "aggregate" concerns (e.g., the general price level). In the real world, we obviously don't live on islands that are completely isolated from each other, but the idea is to examine whether the intuitive ideas due to Milton Friedman actually holds in a simple, albeit abstract, model world. And we see that they do.

Q Nominal money (or nominal money shock) is usually an aggregate variable which is the result of central bank's policy. Hence, how can we have local money shocks? What is the interpretation when we say local money process?

A The central bank only controls very "narrow" money like the money base (M0). The broader money supply is to a large extent affected by the financial sector, e.g., the money multiplier of private banks. This makes the money supply an imperfectly controllable variable, and local shocks in the model can be interpreted as local financial sector shocks.

Q The discussion by Friedman on misperception has to do with relative prices. That is, when nominal wages and prices change, workers react as if their real wage has changed. However, in the Lucas model, what agents misperceive is the real money balance. And the effect on labour supply (hence output) goes indirectly through the marginal utility of real money on consumption. And the direct effect of agents' misperception about relative prices (say the real wage) is not taken care of. However, I think the direct effect of misperception about real wages is more important than the indirect effect of misperception about real money balances. Hence can we say that Lucas' misperception model ignores the more important channel of misperception?

A As mentioned above, the model in (Walsh, 2003) should be seen as a way of checking whether the intuition holds in a formal model. Surely, as we have seen in other parts of the curriculum, the particular transmission mechanism in the MIU model is not an empirically strong one. As you note, it works through the misperceptions of real money, which then affects the consumption-leisure choice. My guess is that Walsh has chosen this mechanism for pedagogical reasons. I.e., to show the misperceptions effect in model framework already covered in the book. I symphatize with your view that misperceptions about the real wage is a potential more important channel than the one arising in a MIU model. We cannot, however, say that the Lucas model *ignores* anything as such. It show the real effects of money due to misperceptions in general. The presentation in Walsh is just one example. See the further discussion on p. 7 of the notes.