

PLENARY SESSION 3

Comments and discussion

Paul Milgrom (Stanford University)

I was wondering about second welfare terms. When you talk about efficiency, I know that in the paper that you described by you and Geoff and Dave Starrett at Stanford, the thing that was great or better about the different levels of emissions than the fixed levels we were comparing to something that involved a kind of change. It was still a constrained deficiency within the level of emissions there on the result correctly, which leads me to wonder about second welfare terms here, whether the things that you are considering are all competitive equilibria, whether all efficient outcomes are competitive equilibria, or whether there are things that we are looking at are efficient that are not competitive equilibria.

Graciela Chichilnisky (Columbia University)

Very good question. In fact, you recall that the theorem I put today is different than the theorem with Geoff Healey and David Starrett in the sense that the money for the ...(indistinct)... locations, you only mention I suppose to finesse the point. That was oriented to you, to that question that you have asked me before. Why? Because in my theorem the quantity is now left floating. So you say, please consider people can produce and they can produce more and they can produce less and the question is it may be true that once you let a quantity flow then you will always get efficiency. But the answer is no, you still need a one dimensional manifest. So that also ...(indistinct)... to answer that question.

But your question now is more sharp. You are saying, the second welfare theorem tells me you can access every efficient location through a market solution. Is this still true? It is not true within the context of the theorem with David Starrett, for the obvious reason that you just mentioned. But it is true in the context of a more general theorem that I proposed, because in that theorem the quantity is left floating and just choose the quantity ...(indistinct)... frontier. You can realise that with an appropriate ...(indistinct)... What you do have, however, is covenants.

Remember I used the word covenants with property rights? What happens there is that these boundary conditions without which an equilibrium would not exist.

If you agree that does not exist but greater efficient locations do you will buy the second welfare theorem. But if their constraints are so destroyed then, I call them covenants although they could be something else, then leaving the total quantity floating, which I do in my theorem, would allow you to produce second welfare term. So I have qualified, yes, but it is my no means the same as second welfare term.

Peter Hartley (Tasman Institute)

Taking off with your parallel with the vouchers for education, the traditional way of thinking of that is that the low income people they wouldn't be purchasing enough education so there's positive externality associated with more education, but the high income people would buy enough any way, so the externalities are infra-marginal. So that would be one way of thinking about why you might want to subsidise the low income people to have education, if for them the externality is marginal, but for the high income people it is infra-marginal. Does that intuition carry over to what you are talking about as to why the distribution and efficiency might be linked in your model, the same kind of idea that it is only for the low income people in the sense that the externality is marginal?

Graciela Chichilnisky

...(indistinct)...

Peter Hartley

I think it is related because what I am saying is the standard way of thinking about the subsidy below income people is the high income people would buy enough education any way, so even though the minimal amount of education has a positive externality, the externality is infra-marginal for the higher income people, but it is still marginal for the low income people. So it is in the interest for the high income people to subsidise the low income people because they are not consuming enough education. There is still a positive marginal externality. So that would link in the income distribution element that there is a reason for subsidising the people with low amounts of private goods just because for them the externality is still marginal but for the high income people it is not.

Graciela Chichilnisky

...(indistinct)...

The remaining discussion is indistinct...

