

Lecture 17: Sraffa; game theory and social choice

It took longer time than anticipated to deal with Samuelson, and therefore we begin with a few comments on the Heckscher-Ohlin model of comparative advantages, followed by a very brief discussion of national accounts. Having then covered all what was left over, we move ahead.

We have already mentioned Sraffa in connection with the Cambridge controversy. The most important academic work of Piero Sraffa (1898 – 1983) was perhaps the collection and publishing of Ricardo's collected work, but he gave rise to a brief interlude in the development of economic thinking with the book "Production of commodities by means of commodities", which should point to shortcomings in the neoclassical theory of value and develop an alternative. This alternative, known as the neo-Ricardian school, never really came off, but it is often referred to, and we take a brief look at it.

Our text is very brief on Sraffa, mentioning only his very early work, and the neo-Ricardian school never really caught on in the US, which may be the reason that E&H are silent about it. The impact was greater in Europe, and the Sraffa's was considered incomprehensible and deep, so we should at least mention it.

After this, we consider one of the other new directions in economic thinking after the war, namely **game theory**. Our textbook covers it in chapter 25, but they are clearly not specialists in the field, and their conception of game theory starting with Cournot and Bertrand is somewhat off the point. Also, we should go a little beyond Prisoners' Dilemma, the one and only piece of game theory known to non-gametheorists. We concentrate on the early decades of game theory, which for many years lived outside mainstream economics until it finally got its breakthrough in the course of the 1980s.

A natural follow-up on this is a brief consideration of expected utility, which is important in game theory. This in its turn goes back to Bernouilli in the 19th century. Our text touches slightly upon it when mentioning prospect theory in chapter 26, we don't follow up on this – it is fashionable at present but too recent to be History of Economic Thought.

Finally, we discuss the impossibility theorem of K.J.Arrow (1921 – 2017) and how it changed the traditional welfare theory – and gave impact to a new specialized discipline, that of *mechanism design*.

We read: Some of the material can be found in the chapters 25 and 26, together with many other things which we are not covering. The chapters are nice reading anyway.