University of Ljubljana

SEB SCHOOL OF ECONOMICS AND BUSINESS

1. Introduction to Econometrics

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Definition of Econometrics

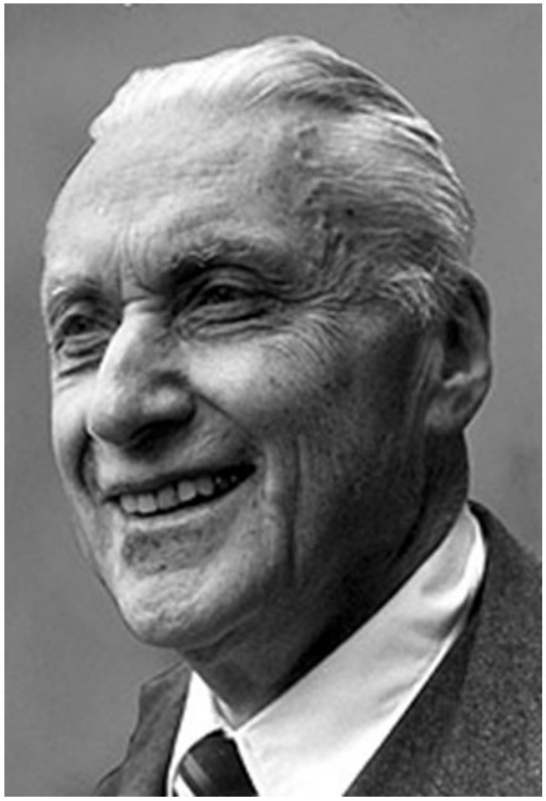
ECONOMETRICS

"Intermediate between mathematics, statistics and economics; we find a new discipline which for lack of better name may be called Econometrics. Econometrics has as its aim to subject abstract laws of theoretical political economy or 'pure' economics to experimental and numerical verification and thus to turn pure economics, as far as possible, into a science in the strict sense of the word."

Ragnar Frisch (1926)

Definition of Econometrics

Ragnar Frisch (1895–1973)
First Nobel laureate in Economic Sciences,
together with J. Tinbergen in 1969



Definition of Econometrics

ECONOMETRICS

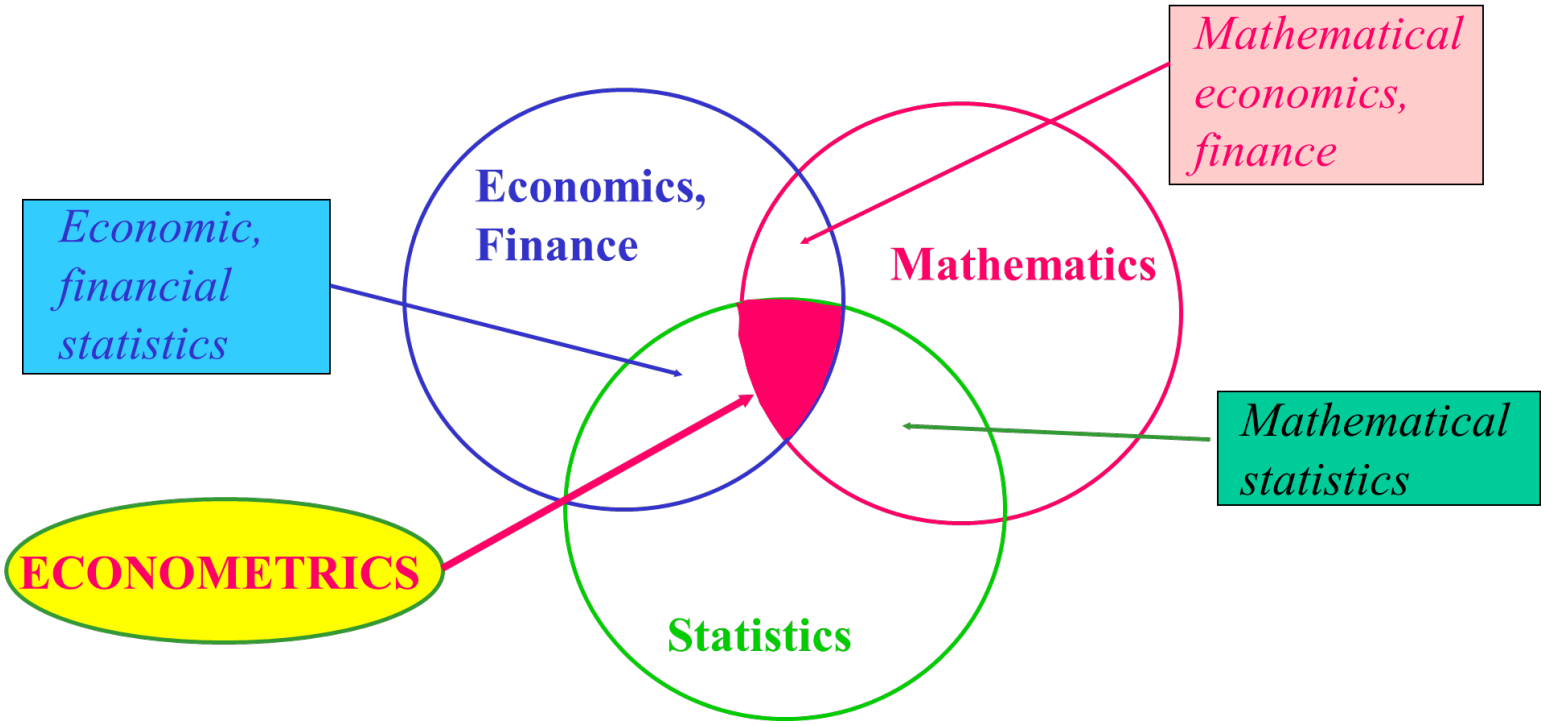
OIKOS	NOMOS	METRON
HOUSE, ECONOMY	FIELD, SCIENCE	MEASURE

"Science about measurement of economic relationships."

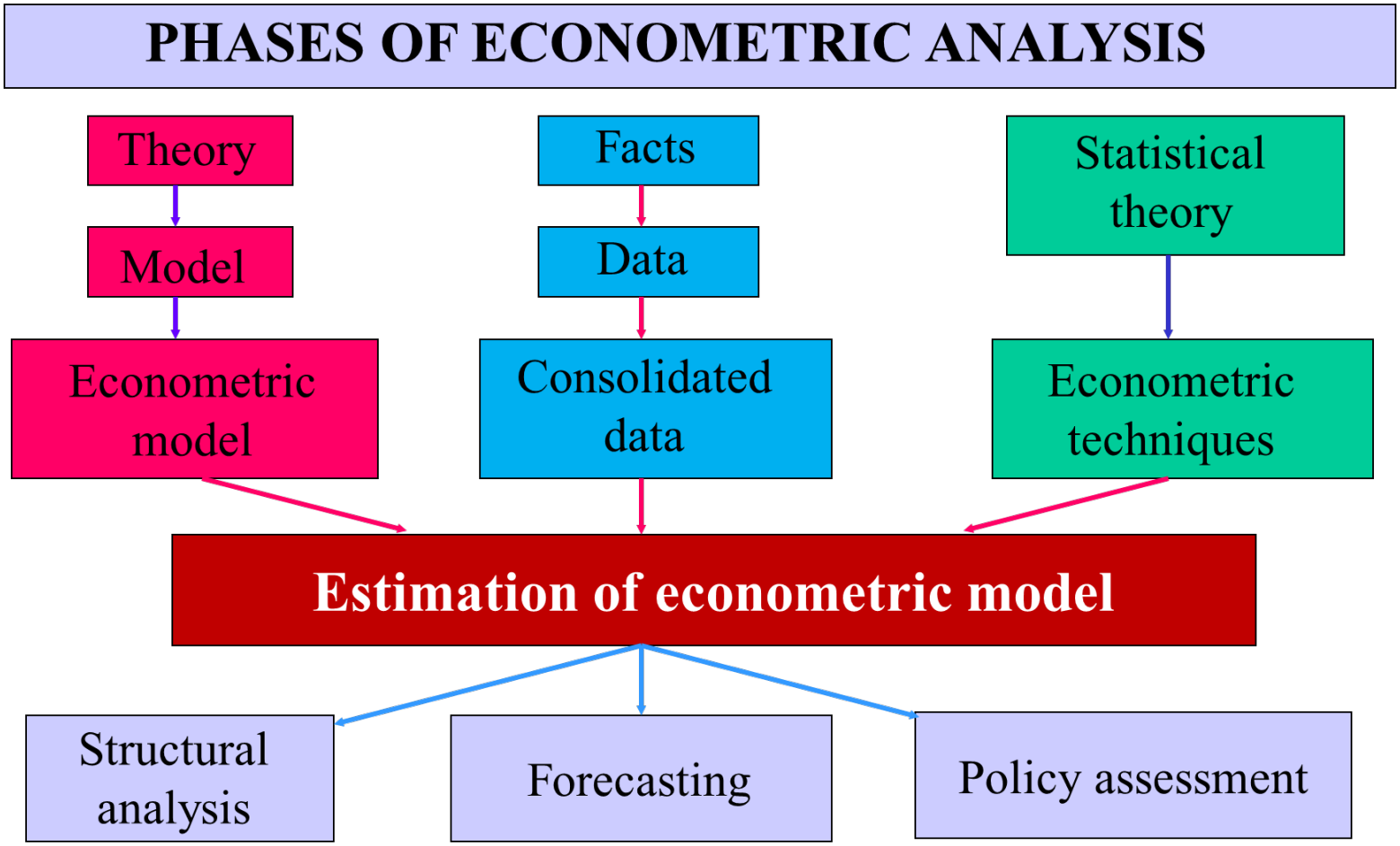
On 29 December 1930, in Cleveland,
Joseph Schumpeter presided 16 of the most eminent economists.
They founded the **Econometric Society.**

In **1933** the **first volume** of **Econometrica** is issued.

Definition of Econometrics



Process of Econometric Analysis



Properties of an Econometric Model

Christ (1966) states six desired properties of an econometric model:

1. Relevance – the model should treat a relevant and interesting topic / problem and should not serve purely to one's intelectual satisfaction.
2. Simplicity – the model should represent economic relationships in the simplest possible form (parsimony). Its purpose should be clear and understandable, such that it enables logic and analytic operations.
3. Theoretical acceptability – specification of the model should be in line with the assumptions (postulates) of theory.

Properties of an Econometric Model

4. Explanatory power – the model should be capable of explaining economic reality to the largest extent possible. It should be in line with observed movements of economic variables included in the model.
5. Reliability of estimated coefficients – the estimates of model parameters should be as accurate as possible. They should have desired statistical properties, such as consistency, unbiasedness, and efficiency.
6. Forecasting power – based on an estimated econometric model, one should be able to prepare satisfactory forecasts of dependent (endogenous) variables, conditional on the values of explanatory (exogenous) variables.

M. Friedman: "Explain much by little."

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