



# Francqui Foundation Conference

## Long-Term Quantification in Ancient Mediterranean History

**Andrew Wilson (All Souls College, Oxford), *Quantifying Roman economic performance by means of proxies: pitfalls and potential***

With an emerging consensus among ancient economic historians that the Roman period saw some (limited) economic growth, the focus of debate has now moved to whether that growth was simply population growth, or whether there was per capita growth as well; when such growth might have occurred, and what drove it and ended it. Answers to these questions would affect to the answers we would give to the question recently posed by Peter Temin and Walter Scheidel of whether such growth was a one-off, unrepeatable effect of the integration of the Mediterranean under Rome, or a process sustained over perhaps two centuries until terminated by exogenous shocks such as the Antonine Plague.

Increasingly, historians and archaeologists are attempting to grapple with these questions by using proxy data that may be thought to have some relation to certain sectors of the economy, or to overall performance. Richard Duncan-Jones, François de Callataÿ (*JRA* 2005), Wim Jongman (*CEHGRW*), Walter Scheidel (*JRA* 2009), and my colleagues and I myself in the Oxford Roman Economy Project have all tried this approach in various ways. Most of the proxies used have turned out to be problematic in one or another aspect, but this does not invalidate the exercise; probing the reasons for data bias leads to a better understanding of what the evidence actually does show. This paper examines criteria for proxy construction (and presentation, to reduce the misleading effects of graphing often imprecise data). It examines a number of commonly used proxies (shipwrecks, stature, lead and copper pollution, animal bone consumption), looking at their strengths and weaknesses. It also presents some early attempts at constructing new proxies, some of which might hold greater promise but which currently either suffer from small sample sizes (fish-salting capacity, water-mills) or regionally uneven collection policies (building inscriptions), neither of which is an insuperable problem. The different pictures presented by archaeological, literary and documentary data for the same phenomena are compared, and the importance of regional disaggregation stressed. Finally, the paper tackles attempts to compare the trends suggested by several proxies.