**BOOK REVIEW**

*Rome's Economic Revolution.* By PHILIP KAY. Oxford and New York. Oxford Studies on the Roman Economy, 2014. Pp. XV, 384. $ 150.00. ISBN 978-0-19-968154-9.

*Rome's Economic Revolution* is a much awaited and relevant book, since it argues fundamental issues, whether and how the Roman economy advanced in "economic complexity"[1] between the 3rd and the 1st century BC and the role of state institutions versus aristocratic financiers in this process. The author discusses this challenging topic through an exhaustive survey of literary, epigraphical and numismatic sources and through the critical and original use of the data provided by the most recent scholarship and offers a relevant contribution to the study of Roman economy.

After a brief introduction (Chapter 1), the book is divided into four parts, each of them articulated in chapters. The first part ("Sources of Revenue") tackles the sources of revenues that caused the increase in bullion availability in 2nd century BC Italy. Chapter 2, dedicated to indemnities and booty, deals with the quantification of the costs of the growing Roman army, while the role of the generals in the redistribution of the wealth deriving from military campaigns is further illustrated through the case study of Scipio Africanus. Chapter 3, dealing with mining revenues, begins with the discussion of the scale of mineral extraction and of the role played by the *societates publicanorum* in its exploitation. In chapter 4, dedicated to the *lex Sempronia de provincia Asia*, Kay argues that this law was "the first clearly identifiable attempt [ … ] to produce a systematic state budget in support of a massive programme of public expenditure." (83)

Part 2 ("The Roman Money Supply") focuses on the monetary impact of the increase in revenues, which brought both to the surge in the monetary output and to the increase of credit availability for bankers. Chapter 5 discusses the relationship between the 'Hopkins' Model' and the surge in the issuance of *denarii* in 2nd and 1st century BC. Despite the differences between Eastern and Western part of Roman Empire both in production and circulation, the use of silver coinage

[1] B. Ward-Perkins, *The Fall of Rome and the End of Civilization* ( Oxford 2005) 104, 150

seems to have expanded. Chapter 6, dedicated to credit and financial intermediation, focuses on the non-specie element of Rome's money supply. Kay convincingly argues that 2nd century bc *argentarii* functioned as bankers, therefore financial intermediation greatly enhanced money supply.

Part 3 ("Application of Funds") deals with the impact of the increased monetization on the economy, which caused an increase of military expenditure and higher private investment in trade and agriculture. Chapter 7, devoted to commercial agriculture, shows that the decrease in Italian public land available for *assidui*, battled by Gracchan reforms, was caused by demographic growth, on which Kay takes an intermediate position in the scholarly debate between 'high-counters' and 'low-counters'. In Chapter 8, regarding trade, capital and interconnected markets, Kay argues that economic development in Roman Empire was mainly driven by trade and trade-related financial activities, not by government, as shown by the case of the Italian *negotiatores* on Delos. Chapter 9, 'The creation of material complexity' deals with state and elite involvement in the creation of infrastructure and industrial development. State contribution, fueled by the increase in war revenues, grew over the years, while the increase in industrial production was mainly due to very small-scale commercial enterprises, not to elite members. Chapter 10, 'The debt crunch', tackles the problem of the lack of development of the banks in 2nd century bc into large financial institutions. Since Roman authorities constantly discouraged professional banking activities and recognized only hard money as capital, the growing complexity of the credit system was increasingly determined by aristocratic financiers, not by professional bankers.

Finally, the fourth part ("Quantification") presents estimates concerning the performance of Roman economy between 150 and 50 BC and suggesting that a growth of per capita GDP is very likely. In chapter 11, entitled "Forecasting the past," Kay draws a quantitative picture of Roman economy through estimates regarding the volume of the different sources of GDP. The growth in GDP between 150 and 50 BC is shown through the combination of De Ligt's data for population growth[2] and Scheidel's for slave population[3] with the highest incomes of the time, in order to get the power-law distribution of household by income in 150, 100 and 50 BC.

[2] L. De Ligt, Peasants, *Citizens and Soldiers: Studies in the Demographic History of Roman Italy 225 BC – AD 100* (Cambridge 2012)

[3] W. Scheidel, *Human Mobility in Roman Italy, II: The Slave Population*, JRS 95 (2005), 64-79

Though frequently referring to Hopkins' "taxes and trade model," Kay proposes a different interpretation, as he presents a Roman State whose economic relevance decreased with the end of the indemnities derived from warfare. To these low-intensity state institutions Kay juxtaposes the growth in power and wealth of individuals, members of the equestrian or senatorial elites, on which the State became increasingly dependent. The state's dependence on the fortune of aristocratic financiers was the ultimate cause of the *inopia aerarii,* the credit crisis in 88 BC. In Kay's reconstruction, this credit crisis further enhanced the economic power of the elite. Growth in per capita GDP, though based on estimates, seems to correspond to an actual growth in economic activities based on agriculture or on trade, but didn't correspond to a growth in the size of government, but in the complexity of private organizations. Kay puts forward a convincing thesis that the Roman economy did grow in proportions and complexity, but the Roman State did not.

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