Reviews

Money Changes Everything: How Finance Made Civilization Possible **William N. Goetzmann** Princeton, New Jersey: Princeton University Press, 2016 (600 pages)

In an age that often dismisses or indeed condemns financiers by blaming them for our problems, this book provides a critical defense of finance rooted in an empirical study

of past civilizations. This is a sweeping, big history that tackles the history of finance from ancient Sumeria to modern Europe. Goetzmann's normative view is that financial tools are mostly stabilizing forces and are "generally life improving" (14). His empirical case demonstrates clearly that civilizations used financial solutions to address problems of social organization.

A key to understanding this history is to recognize how finance enables us to cooperate over time and space. In Goetzmann's words, finance "moves economic value forward and backward through time" (1). In particular, finance measures risk, it determines the best use of capital, and it structures production. It also unites people under a common culture, expands knowledge and potential, contributes to a greater division of labor, enables longdistance trade, stabilizes a tax base, and provides for large-scale wars. Finance democratizes society because it gives people of modest means the ability to draw on large sums of money for their own projects.

There seems to be a current of evolutionary thought implicit in this book. Goetzmann explains that "financial techniques were invented to make money" (12), but those that endured must have also been socially valuable and therefore "selected" through much trial and error. This occurred on both small and very large scales from ancient villages to full-blown civilizations. Societies with functioning financial systems outperformed those that lacked the same, and the fact that we see so many financial instruments emerging at the same time as early civilizations supports the view that finance is a necessary element of civilization. Goetzmann does not explicitly make the claim that civilization would be impossible without finance, but he provides convincing evidence for such a thesis. In fact, on this evidence, finance of some kind seems almost like a logical necessity for civilization.

The first half of the book is the most fascinating. Especially so is Goetzmann's coverage of the emergence of financial instruments in ancient Sumeria. Goetzmann admits that the history of financial institutions in Sumeria is contested ground, but he paints a convincing picture of how language, finance, and social organization were linked. Tiny clay figures, representing commodities, may have been used to record transactions and debts. Over time, these figures became two-dimensional drawings on clay tablets, and then evolved as the earliest form of written language. Clay tablets from Mesopotamia record transactions of grain, cattle, honey, and so forth between everyday people. Finance also provided support to the centralizing city-states as they raised money to war against outside threats.

According to Goetzmann, most modern financial tools are actually ancient. The Sumerians invented compound interest loans and operated on a 360-day administra-

History and Philosophy of Economics

tive calendar. In Athens, banking, coinage, and commercial courts first appeared. Here, Goetzmann argues that public finance was necessary for the emergence of democracy. Athenian banks allowed deposits, while court systems regulated behavior. Athens needed finance to organize its long-distance trade, specifically its heavy importation of grain. Finance organized and supported this complex economic system, thus creating a larger division of labor. Athenian financiers recognized the price of risk or the "time value of money."

To administer their empire, the Romans developed a more complex financial system. For example, they invented limited liability and used silver currency, which they sometimes debased. In China, paper money aided transactions, and bureaucracy brought monitoring and incentives to address the principal-agent problem. Goetzmann describes the Knights Templar as an alternative banking institution that was separate from a particular state and that could provide credit and banking services for Western Europe. Venice was the first to issue public debt in the form of bonds. Later chapters explore the growing complexity of financial arrangements, largely in the European world.

Such a wide-ranging history should not be blamed for its omissions, but there are of course huge sections of the earth that receive little coverage. Ancient Egypt, for example, might provide an interesting case to compare with Sumeria. Finance in African societies or in the pre-Columbian Western Hemisphere would also be valuable points of comparison.

While the introduction is a bit slow to get going, his chapters that follow are masterful, and Goetzmann should feel no need to apologize for bringing into the text his own personal research stories. This is mostly a synthesis of research, but it is impressive in drawing a line from the ancient to the modern world. Finance, as a theme of history, should not be neglected. In this telling, finance emerges as a main theme of history. It is the lifeblood of civilization.

> —Michael J. Douma Georgetown Institute for the Study of Markets and Ethics, Georgetown University

The Great Invention: The Story of GDP and the Making and Unmaking of the Modern World Ehsan Masood

New York and London: Pegasus Books, 2016 (231 pages)

This highly readable story examines the limits of Gross Domestic Product (GDP). Unfortunately, Masood falls prey to some of the conceits of contemporary mainstream economics. Fortunately, the book's shortcomings are not fatal.

Masood starts with a history of GDP and its roots in the desire of the 1930s and 1940s to measure economies—first to gauge the effectiveness of government efforts at recovering from the Great Depression, then to track war readiness, and later to determine the effectiveness of the postwar Marshall Plan aid.