

INTRODUCTION



In 1899, astrologer Evangeline Adams moved her business from Boston to New York's Upper East Side. Adams later wrote that her horoscope had directed her move, but Manhattan also had a greater concentration of her most lucrative and reliable clients: businessmen and investors in securities. When her hotel burned down shortly after her arrival, someone (possibly Adams herself, given her genius for self-promotion) informed the newspapers that she had predicted it the previous day, and she became a celebrity.

Over the next thirty years, many New Yorkers sought Adams's advice on market trends, anxious for any insight—however absurd its foundations—that might help them evade the ravages of economic turbulence. In addition to stock market tips, she offered advice on general business trends. She originated the Adams Philosophy, which she described as “a compound of truths of all truths, applied in the light of an intelligent optimism to the requirements of Western everyday life.” A financial newsletter she began publishing in 1927 further broadened her reach, and she became a household name when she “correctly” predicted the stock market crash of 1929. By 1930 she was giving radio broadcasts on WABC and writing a regular newspaper column in the *Washington Post*. Most of the thousands of letters she received each day asked for advice about investing; prior to the Depression, most had asked about love. She died a wealthy woman in 1932.¹

Even in her own time, many regarded Evangeline Adams as a fraud and scam artist.² Her success, however, points to a profound anxiety about the future. Capitalism, after all, is a uniquely future-oriented economic system in which people make innovations, apply for patents, watch interest rates, and in other ways “bet on the future.”³ The owners of capital deploy their resources—that is, they make investments—so as to maximize their future earnings. The early twentieth century was an unusually perilous time to make such investments, however. Entrepreneurs and big business had transformed

America from a predominantly agricultural society to an industrial one, and the pace of change seemed only to increase.

Amid all the wondrous new inventions of the age—steam-powered locomotives, electric-powered factories and lighting, automobiles, synthetic fibers (like rayon, which emerged in the nineteenth century), and so on—the unquenchable human longing for predictability and certainty persisted. Adams's story reflects an intense curiosity—and anxiety—over what the future held for the nation's increasingly industrial, integrated, and volatile economy.

More troubling than the pace of change was the degree of economic turmoil. Not only was the American economy being transformed at high speed, but periods of rapid growth and prosperity were interspersed with economic crises and depressions that destroyed fortunes, families, firms, and lives. Financial crisis was followed by severe economic hardship in 1837, 1857, 1873, 1893, 1907, and 1920—to say nothing of the events of 1929 and the Great Depression. Many attributed these downturns to speculation and to schemes by leading business titans and politicians. By the early twentieth century that type of thinking began to change. Entrepreneurs and academics began to define patterns of periodic fluctuations in production, employment, and other economic activity as the “business cycle.” In 1915 Harvard Business School professor Melvin Copeland wrote, “It is now generally agreed by students of the subject that the ups and downs of business prosperity are due to deep-seated influences, and business men are more and more giving up the long persisting notion that changes in business conditions are caused primarily by tariff acts, political happenings, or court decisions.”⁴

The unpredictability of the business cycle, however, was both a political and an economic problem. For businesspeople, downturns meant lower profits, decreased returns on investments, inventory gluts, and idle factories. For labor, the troughs of the business cycle could mean disaster. Few industrial workers had enough savings to last more than a couple of weeks, and unemployment quickly led to hunger, homelessness, and privation. The landmark clashes of late nineteenth- and early twentieth-century labor history tended to occur in periods of hardship. After 1917, the new Soviet Union loomed as a reminder that socialist revolution was a real alternative to capitalism if the economy became untenable as a result of violent swings.

For all of these reasons, the late nineteenth and early twentieth centuries saw a surge of interest in speculation about the uncertain future. Evangeline Adams and the promotion of astrology was one manifestation of this phe-

nomenon. The rising popularity of works of futuristic science fiction, such as Edward Bellamy's *Looking Backward* (1887) and H. G. Wells's *The Time Machine* (1895) and *The War of the Worlds* (1898), was another demonstration of public interest in the future.

Academics and intellectuals shared similar concerns. Walter Lippmann, one of the period's preeminent public thinkers, argued in *Drift and Mastery: An Attempt to Diagnose the Current Unrest* (1914) that many of the era's problems stemmed from the incompatibility of old institutions and practices with a dramatically changed social and economic context.⁵ In *Risk, Uncertainty, and Profit* (1921), the University of Chicago economist Frank H. Knight described an economy in which businesspeople constantly sought ways to gain control over their changing world. "At the bottom of the uncertainty problem in economics is the forward-looking character of the economic process itself," he observed. Plans for production, to give just one example, required predictions from the outset. "The producer . . . must *estimate* (1) the future demand which he is striving to satisfy and (2) the future results of his operations in attempting to satisfy that demand."⁶ Knight wrote that businesspeople tried their best to reduce the amount of risk in society by purchasing insurance, by forming trust companies, and by improving their bookkeeping and other methods of management. Despite these measures, many aspects of business and life remained uncertain, including when the next economic crisis would hit.

FORECASTERS

This is a book about a group of entrepreneurs who, like Evangeline Adams, identified a business opportunity in the anxiety about the economic future that pervaded the early twentieth century. It is a story, in part, about how fortune telling was professionalized. Unlike Adams, whose insights into the future rested on her purported ability to read the stars, the entrepreneurs profiled here were statisticians and economists who based their predictions on their claim to systematic scientific insight. This book describes the first generation of economic forecasters and the methods they created to predict the future of the economy.

The forecasting field was initially developed by entrepreneurs like Roger Babson and John Moody following the Panic of 1907, as businesspeople

were forcefully reminded, yet again, of the ups and downs of the economy. By World War I, there were only about ten forecasting agencies operating in the United States. Professional economists, like Irving Fisher and Warren Persons, advanced the field after the war, joining the growing ranks of forecasters. By 1925, Fisher wrote, “We now have nearly fourscore forecasting agencies to help the business man.”⁷

These forecasters emphasized what today we would call the “real economy”—upcoming changes to production, employment, trade, and services—rather than trends in the stock market. They usually distributed their predictions in weekly bulletins that carried relevant business news and economic indexes. Along with their predictions, forecasters often included charts and graphs that showed economic change over time and pointed to the future. These had various names, such as Babson’s Composite Plot and the Harvard Economic Service’s Index of General Business Conditions.

Forecasters also devoted time to sales and marketing. Successful forecasting agencies developed ways to publish, distribute, and advertise their predictions. Some forecasters built sales forces to travel from office to office in lower Manhattan or in Boston and Chicago. Others sent their representatives to Rotary Clubs and churches in smaller cities and towns to give lectures. Nearly all forecasters advertised in the *New York Times*, the *Wall Street Journal*, the *Commercial and Financial Chronicle*, and the *Chicago Tribune*. Some forecasters packaged snippets of their forecasts to be sold through news syndicates and to appear in daily newspapers such as the *Alton (Illinois) Evening Telegraph*, the *Salt Lake Tribune*, and the *Montana Standard* of Butte.

While entrepreneurs and academics developed the industry, the American government also became deeply involved. Herbert Hoover, in particular, proved to be a big advocate of forecasting. He pushed the Department of Commerce, which he headed from 1921 to 1928, to increase the amount of economic data that it collected and published. He made it a priority of government to study the nature of business cycles and to bring business executives to Washington, D.C., to improve their ability to spot upcoming trends.

Together, these actors—entrepreneurs, academics, and politicians—helped raise the stature of economic forecasting and embed the practice in every corner of business and government. They sought to create a distinction between the “respectable” profession of scientific forecasting, on the one hand, and the practices of fortune telling and speculation, on the other. In this effort they enjoyed wide institutional backing. Courts of law routinely sup-

ported those who made predictions based on dispassionate scientific rules rather than those who, say, enlisted the help of the stars.⁸ Many U.S. jurisdictions established statutes prohibiting the practice of “occult arts” in fortune telling. In a typical prosecution dating from 1918, a woman was arrested in New York and charged under the state Code of Criminal Procedure (section 899-3); she was found to be a “disorderly person” who was “*pretending* to tell fortunes.”⁹ Despite her fame, Evangeline Adams lived under constant threat of such legal action.

Forecasters’ reliance on science and statistics as methods for accessing the future aligns their story with conventional narratives of modernity. The German sociologist Max Weber, for instance, argued that a key component of the modern worldview was a marked “disenchantment of the world,” as scientific rationality displaced older, magical, and “irrational” ways of understanding. Indeed, the forecasters profiled in this book certainly saw themselves as systematic empiricists and logicians who promised to rescue the science of prediction from quacks and psychics. They sought, in the words of historian Jackson Lears, to “stabilize the sorcery of the market.”¹⁰

The relationship between the forecasting industry and modernity was an ambivalent one, though. On the one hand, the early forecasters helped build key institutions (including Moody’s Investors Service and the National Bureau of Economic Research) and popularize new statistical tools, like leading indicators and indexes of industrial production. On the other hand, though all forecasters dressed their predictions in the garb of rationality (with graphs, numbers, and equations), their predictive accuracy was no more certain than a crystal ball. Moreover, despite efforts of forecasters to distance themselves from astrologers and popular conjurers, the emergence of scientific forecasting went hand in hand with rising popular interest in all manner of prediction. The general public, anxious for insights into an uncertain future, consumed forecasts indiscriminately.

PREDECESSORS

For all their novelty, the forecasters of the early twentieth century did not emerge out of nowhere. The preceding two or three centuries, and particularly the nineteenth, were a period of activity and progress for a wide variety of predictive endeavors. Economic forecasting drew on a prehistory of three

overlapping though distinct streams: changes in climate-related prediction, advances in quantitative business techniques and information gathering, and developments in economic theory.

Nineteenth-century innovations in meteorology were powerfully suggestive for the first generation of economic forecasters, though the meteorologists drew on different bodies of empirical data and theoretical techniques. Natural philosophers of the Renaissance and earlier investigated atmospheric phenomena, but the science of meteorology did not systematically engage with the subject of prediction until the mid-nineteenth century. It was only then, with the development of a long-distance telegraph network, that empirical observations about the winds could arrive in advance of the winds themselves.¹¹ In 1849, the United States initiated the first state-sponsored network of climate observatories under the Smithsonian Institute, followed within a decade by similar efforts in France, Belgium, and Britain. The methods of the nineteenth-century weather forecasters were largely superseded after the turn of the century by the work of Norwegian scientist Vilhelm Bjerknes, who developed equations for the hydro- and thermodynamics of the atmosphere.¹² Regardless of its lasting scientific value, however, nineteenth-century weather forecasting became a fruitful site for debates on the relationship and value of deductive and inductive approaches to the study of complex systems or, as contemporaries called it, the practices of speculation versus observation.¹³ One contribution to this burgeoning science, John Tice's *Elements of Meteorology* (1875), inspired Samuel Benner's *Prophecies of Ups and Downs in Prices* (1878), which, in turn, shaped Roger Babson's approach to economic prediction. Moreover, many forecasters, including Babson and James H. Brookmire, borrowed terms from meteorology, calling their charts "business barometers."¹⁴

Business and economic forecasting owed more obvious debts to nineteenth-century advances in the quantity and quality of business information and statistics. Commercial and banking houses had compiled charts of commodity prices and exchange rates for centuries, allowing merchants to practice a simple time-series analysis to stay abreast of the rate of change. From the mid-nineteenth century, commercial publications—most notably London's *The Economist* (from 1843) and New York's *Commercial and Financial Chronicle* (from 1865)—published regular updates on prices and other financial data. Parliamentary efforts beginning in 1797 to comprehend the rise and fall in the reserves of the Bank of England led to innovation in

index numbers and in some of the first moving averages.¹⁵ In the United States, business statistics grew significantly in the late nineteenth century. The American Railway Association published a monthly bulletin that included freight car haulings and idle car figures. Import and export statistics were printed in the *Monthly Summary of Commerce and Finance*; bank statistics, in *Bradstreet's* and *The Commercial and Financial Chronicle*.¹⁶ John Moody drew heavily on the work of John M. Bradstreet and other business-information analysts in forming his approach to forecasting.

Early twentieth-century forecasters also built on the work of economists, including those who described themselves as political arithmeticians. Under Oliver Cromwell, William Petty (1623–87) offered the first rigorous assessment of a country's national income and wealth, looking beyond stores of gold and silver to consider both stocks of wealth and the flows issuing from them. In 1660, with the restoration of the House of Stuart, cloth merchant John Graunt offered Charles II analyses of national birth and death statistics.¹⁷ In the nineteenth century, the English economist William Stanley Jevons (1835–82) enlisted mathematical techniques in one of the earliest statistical analyses of the business cycle. His paper titled “Commercial Crises and Sun-Spots” (1878) linked economic fluctuations to harvest and meteorological conditions.¹⁸ In his 1892 Yale dissertation, economist and forecaster Irving Fisher described Jevons as a major influence.¹⁹

CAPITALISM AND COMFORT

The forecasters profiled in this book developed their businesses in this rich and vibrant context of efforts to predict the future. In doing so, they drew on meteorological, commercial, or economic traditions—and most often some combination of them. But they also created something new. Roger Babson, Irving Fisher, John Moody, C. J. Bullock, Warren Persons, and their contemporaries were the first to envision the possibility that economic forecasting could be a field, or even a profession; that the systematic study of a vast range of statistical data could yield insight into future business conditions; and that a market existed in business and government for weekly economic forecasts. The first generation of forecasters found ready audiences for their predictions. Executives at large firms like United States Rubber, National Biscuit, and American Tobacco were eager to gather all sorts of statistical information

from outside analysts, as well as from their accountants and finance departments, as they coordinated the work of their sales, manufacturing, and purchasing departments.²⁰

Brokers and financiers also purchased forecasting newsletters. In the nineteenth century, most firms had financed their operations through retained earnings, but increasing numbers now did so by borrowing from banks or issuing corporate bonds and other financial instruments. New brokerages seemed to open almost daily in New York City after the turn of the century, remarked one observer, to raise capital for new enterprises or fund the expansion of existing ones. In 1913, for instance, roughly \$1.5 billion of American bonds were issued, almost all of which passed through U.S. bond houses.²¹

Finally, forecasters also found a growing market for their predictions among individual investors. At the start of the twentieth century, only 500,000 Americans owned stocks; by the end of the 1920s, that figure had increased twenty times to 10 million. That works out to less than 1 percent of the adult population in 1900 versus 12 percent in 1929.²² The rise in stock ownership was a result of increasing wealth and strong marketing campaigns, including the World War I Liberty Bond drive, that advocated securities ownership.

Forecasters promised to help people make money and profits in an economic system that seemed especially chaotic and unpredictable—and at the same time seemed to offer great potential returns. They reassured investors, bankers, and managers in large part because they promised that the trends of prosperity and depression were decipherable.

More broadly, forecasters offered comfort to those who feared that capitalism, as an economic system, was too dangerous and volatile. Forecasts, after all, were more than predictions of the future. They were assumptions about what the economy was and how the economy worked. By pointing out trends in data and creating charts and models, forecasters made capitalism seem natural, logical, and, most of all, predictable.²³

Such reassurances were significant during a time when the idea of a democratic capitalist economy was under great threat in many regions of the world. Some social scientists thought that democratic capitalism was merely a temporary form of government that would give way to something better—either a utopian socialist state or a technocracy.²⁴ The realities of the early twentieth century were far more brutal. World War I was especially bloody, with some nine million casualties. Europe was left with an array of political systems:

thirteen republics and thirteen kingdoms, many of which were constitutional monarchies. And the war's aftermath continued to be a period of violent revolution and civil war, most notably in Russia. Other countries, including Germany, Poland, France, and Italy, had active communist parties. In the 1920s and 1930s several European countries took far-right turns to fascism, including Italy, Spain, and Germany. By the late 1930s, dictators ruled much of Europe.²⁵

COMPARING BIOGRAPHIES

Rather than relating the emergence of forecasting in a chronological format, *Fortune Tellers* adopts a more biographical approach. Each chapter tells the story of one influential forecaster. Chapters 1–3 focus on, in turn, Roger Babson, Irving Fisher, and John Moody. Each of these forecasters represented a different way to make predictions and to make sense of the economy. Chapter 4 looks at the team of Charles J. Bullock and Warren Persons, who led the Harvard Economic Service, and their effort to build economic “observatories” around the world.

Chapter 5 takes up the work of economist Wesley Mitchell and his role in Herbert Hoover’s Business Cycle Committee at the Department of Commerce. This chapter details the role of the state in promoting and enabling the forecasting industry. As commerce secretary, Hoover sought to provide objective and precise data to improve the ability of business managers and business analysts to make forecasts. This, he believed, would lead businesspeople to employ countercyclical strategies to lessen the extremes of the business cycle.

This book crosses the traditional boundaries between the history of economic thought and cultural history. The scholarly contributions of Irving Fisher, for instance, are described alongside the commercial exploits of Roger Babson, who believed that Newtonian forces determined the movements of the economy (what comes up must come down). An entirely different history of forecasting could be told that emphasized the work of business cycle analysts or economists, such as Joseph Kitchin or Holbrook Working, in improving analytical and conceptual approaches to forecasting in this period.²⁶

Fortune Tellers, by contrast, leaves aside the narrative of progress in economic science. It focuses instead on the lives of the entrepreneurs who

advertised, marketed, and promoted their predictions to the general public. For example, Roger Babson, Irving Fisher, and John Moody were all popular authors and columnists who wrote on a range of topics, including health and religion. Fisher, not unlike his English contemporary John Maynard Keynes of Cambridge, was an avid investor; and both of the Harvard scholars examined here (Charles Bullock and Warren Persons) had careers on Wall Street as well as in Harvard Yard. This mixture of commerce and academia is not incidental: one interest informed the other, and together they reveal a portrait of a society preoccupied with the problems of uncertainty and money-making.

The individuals profiled in this book were chosen in part because of their contemporary significance—Roger Babson, for example, boasted the greatest circulation for his forecasting newsletter—but also because they each understood the logic of capitalism differently. Each one looked at a growing amount of information on the U.S. economy on prices, manufacturing output, crop production, interest rates, and other statistics. Each came up with different ways to harness these data to pierce the mysteries of the future, whether by looking at historical trends, analogies, and expectations or by other methods.

Each of the forecasters, too, had a different view of science—the intellectual and practical approach that would help eliminate uncertainty from the economy. For Roger Babson, “science” meant investigating the application of the theories of Sir Isaac Newton, especially Newton’s third law of motion, to economic phenomena. For Irving Fisher, it meant the pristine world of mathematics and its power to reveal causal relationships. For John Moody, “science” meant transparency and the nearly limitless gathering of business information about industries and markets. For C. J. Bullock and Warren Persons, at Harvard, the scientific method meant observation, especially the careful monitoring of change over time in critical economic sectors, such as securities prices, production figures, and interest rates.

The enlistment of scientific order, of all types, helped forecasters create their models and their visions of the economy. But it also led some of them, at times, to embrace social engineering schemes, including Prohibition and eugenics, that had large followings at the time. Sherwood Anderson’s 1919 novel, *Winesburg, Ohio*, captured the darker aspects of this part of American society in this period. He depicted a town in which people, during a time when ideas were rapidly changing, became obsessed with a single truth, hold-

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ing onto it until it dominated and disoriented them. Anderson described his obsessive characters as “grotesques,” a harsh term, but one that captures the dangers that could result from single-minded determination and zeal for control amid a world in flux.²⁷

The story of modern economic forecasting begins with Roger Babson, who, more than anyone else, helped invent this complex figure, the “forecaster.”