

**“Celebrated, Criticized, and Copied Around the World”:
The Harvard Economic Service and its Place in 20th Century Economic History**

Nicolas Sambor
Senior Thesis
Department of History, Columbia University
April 6, 2016

Seminar Advisor: Prof. Rebecca Kobrin
Second Reader: Prof. Adam Tooze

TABLE OF CONTENTS

Introduction: The Incomplete Historiography of Economic Forecasting	2
Chapter 1: Economic Knowledge and Power.....	9
Chapter 2: “Intellectual Geopolitics” and a New Economic Modernity	27
Conclusion: The Structural Necessity of Economic Forecasting.....	37
Bibliography	42

Introduction: The Incomplete Historiography of Economic Forecasting

In the last years of the 1910s a group of economists at Harvard University began a process that changed the field of economics forever. They united, in fact, to found and grow the world's first for-profit and research-driven economic forecasting institution. This institution, the Harvard Economic Service (hereafter "the Service"), endeavored to find new frontiers in economics, which had grown increasingly preoccupied with finding "scientific" modes of expression and method since the turn of the twentieth century.¹ In its lifetime the Service went by various official names, all of which evoked the prestige of the university it associated with: the Harvard Economic Service (1922-1926), Harvard Economic Society (1926-35), and the Harvard Committee on Economic Research (first referenced in 1917). Its two publications, the *Review of Economic Statistics* (est. 1919) and *Weekly Letters* (est. 1922, annual subscription fee of \$100) catered to academic and corporate audiences respectively.²

The Service soon realized, however, that its ambitions stretched far beyond deciphering "the perplexing oscillations and irregularities of modern trade and industry."³ Even becoming the world's first professional forecasting service, under the aegis of perhaps America's most respected university, was unlikely in their view to immortalize them in history. It quickly became clear, as the 1920s grew increasingly fevered with speculative activity in global financial markets, that their legacy lay instead in transforming altogether the wider public's understanding of economics and economic

¹ See Mary S. Morgan, *The History of Econometric Ideas* (Cambridge: Cambridge University Press, 1990); and Roy E. Weintraub, *How Economics Became a Mathematical Science* (Durham, N.C.: Duke University Press, 2002)

² The annual fee for the *Weekly Letters* was in line with other major forecasting newsletters' of the time; the equivalent of \$100 in today's dollars would be approximately in the range of several thousand dollars.

³ Edward S. Mason, "The Harvard Department of Economics from the Beginning to World War II," *Quarterly Journal of Economics* 97 (August 1982): 383-433, especially 414-15.

life—transforming economics into a science, and the economy into a predictable, profitable, and perpetual scientific experiment.⁴

While few scholars recognize 1917 as a turning point in economic history, they paid overwhelming attention to another story. This story was that of the “Great Crash” of 1929, still amongst the worst stock market collapses of all time; and, after 1929, the dominance of the Great Depression will into the 1930s.⁵ The historiography of this period has overwhelmingly distorted the Service’s motivations and legacy. John Kenneth Galbraith and Charles Kindleberger, titans of economic history in their own right, were particularly guilty of favoring this approach. Their work connected the pain of life after 1929 (persisting well into the 1930s) with the greed and over-reaching of economic forecasters, whose academic rigor and pedigree had proven false bulwarks against the catastrophic financial crash of 1929. “One problem with warnings,” Kindleberger remarked in this vein, “is embodied in the fable of the boy who cried ‘Wolf.’ Economic forecasters may know the direction of a move in business conditions, prices, and credit, but their capacity to foretell its precise timing is limited.”⁶ The Service was thus depicted as an institution that had not merely failed to deliver on its most fundamental promise to

⁴ This is the driving argument behind Walter Friedman’s *Fortune Tellers: The Story of America’s First Economic Forecasters* (Princeton: Princeton University Press, 2014). According to Friedman, the 1920s were not an isolated period of economic activity, but the culmination of decades of “social and economic turbulence” stretching back to the crises of 1873, 1893, 1907, and 1920 that had punctuated the late nineteenth and early twentieth centuries. “For those who had suffered through financial panics,” Friedman reasoned, “forecasting offered the idea that economic activity was not simply random, but followed discernible patterns that could be predicted...creating the comforting idea that business activity was cyclical in the way that the weather was cyclical with changing seasons.” See Walter A. Friedman, *Fortune Tellers: The Story of America’s First Economic Forecasters* (Princeton: Princeton University Press, 2014), 127.

⁵ In particular, see John Kenneth Galbraith, *The Great Crash 1929* (Cambridge, MA: Riverside Press, 1955); and Charles P. Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises* (New York: John Wiley & Sons, Inc., 1996).

⁶ Kindleberger, *Manias, Panics, and Crashes*, 85.

accurately forecast economic activity, but had also failed to remain dispassionate and scientific while doing so.

In general, this kind of historiographical approach towards economic forecasters like the Service has detracted from our ability to understand such organizations' true worth. Domestically, the Service and its contemporaries were far more sophisticated agents of economic knowledge than appeared the case at face value. They deeply influenced the development of economic science within society, and defied convention by combining both academic and business interests to disseminate new, experimental, and powerful forms of economic knowledge.⁷ The decline of the Service in the United States after 1931, far from spelling doom for domestic economic forecasting, instead marked an important milestone in the transfer of economic power from private forecasting services to government agencies like the National Bureau of Economic Research (NBER) and the U.S. Department of Commerce.⁸

Internationally, the Service's aggressive expansion overseas in the 1920s was the first instance of what this essay terms "intellectual geopolitics," via the embedding of a distinctly American form of economic knowledge within foreign economic institutions—akin to a prototypical form of "soft power." The Service nuanced previously militaristic attitudes toward geopolitical behavior amongst Western powers in this period, encouraging the copying of its methods and philosophy by admirers in countries like

⁷ See for instance E. W. Pettee, "Short-Term Price Forecasting, 1920-29," *Journal of Business of the University of Chicago* 9 (1936): 280-300.

⁸ Friedman, *Fortune Tellers*, 181. The NBER (est. 1920) was founded approximately at the same time as the Service, and a number of economists held key positions at both organizations. For further details on the NBER in this period, see Solomon Fabricant, "Toward a Firmer Basis of Economic Policy: The Founding of the National Bureau of Economic Research" (working paper, National Bureau of Economic Research, 1984). For more detail on the U.S. Department of Commerce, see their *Survey of Current Business*, in Joseph Brandes, *Herbert Hoover and Economic Diplomacy* (Pittsburgh: University of Pittsburgh Press, 1962), 20.

Britain, Germany, and the Soviet Union.⁹ That these initially imitative organizations later diverged from the Service's ideology and methodology should not obscure the Service's achievements on the whole.

Yet simplistic interpretations of the Service continue to run unchecked for two reasons. First, the historiography of economic forecasting remains at best fragmented amongst various countries and institutional case studies, and at worst subsumed entirely within narratives about the Great Depression, financial panics like the Great Crash of 1929, or the development of economic ideas and knowledge since the end of the nineteenth century.¹⁰ Moreover, the most thoughtful and comprehensive examples of studies on economic forecasting have detailed its successes, failures, and legacies (of ideas and forecasters both) without addressing the questions underpinning the subject at large. Simply put, how could economic forecasting have remained a legitimate intellectual exercise if no forecasting service had successfully predicted the onset of the twentieth century's greatest economic disaster? Where else could such an accusation hit

⁹ Prominent economists such as John Maynard Keynes (Britain), Ernst Wagemann (Germany), and Nikolai Kondratieff (USSR) all established regular contact with the Service in this period. For further detail on their work as related to the subject of economic forecasting, see London and Cambridge Economic Service, *Monthly Bulletin*; subject matter on the *Institut für Konjunkturforschung*, in J. Adam Tooze, *Statistics and the German State, 1900-1945: The Making of Modern Economic Knowledge* (Cambridge: Cambridge University Press, 2001); and N. D. Kondratieff (Conjecture Institute, Moscow), "The Static and the Dynamic View of Economics," *Quarterly Journal of Economics* 39 (August 1925): 575-83.

¹⁰ On institutional case studies in America and abroad, see Friedman, *Fortune Tellers*; Stacy H. Smith Jr., "A Study of the Harvard Economic Service" (master's thesis, Stanford University, 1929); and J. Adam Tooze, *Statistics and the German State, 1900-1945: The Making of Modern Economic Knowledge* (Cambridge: Cambridge University Press, 2001). On the Great Depression, see Milton Friedman and Anna Schwartz, *A Monetary History of the United States 1867-1960* (Princeton: Princeton University Press, 1963). On financial panics, see Galbraith, *Great Crash*; Kindleberger, *Manias, Panics and Crashes*; and Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009). On the development of economic ideas and knowledge, see Joseph A. Dorfman, *The Economic Mind in American Civilization* (New York: Viking Press, 1959); Morgan, *History of Econometric Ideas*; Marion Fourcade, *Economists and Societies: Discipline and Profession in the United States, Britain and France, 1890s to 1990s* (Princeton: Princeton University Press, 2009); and Weintraub, *How Economics Became a Mathematical Science*.

truer than the Service—the most celebrated, critiqued, and copied economic forecaster of its time?¹¹

Indeed, the Service had coexisted with and directly influenced monumental studies of economic cycles, institutional economics, government agencies, and corporate behavior.¹² Yet it was barely if at all referenced in such works, because it had failed to survive the aftermath of the Great Crash. Broad studies of economics during the twentieth century often omitted references to the Service entirely, choosing to focus on economic forecasting as a component of national economic policies during the 1930s—even if such policies had at least partially co-opted the Service’s methodology.¹³ Narrower studies of the period spanning the Service’s lifetime preferred to express skepticism toward the achievements of economic forecasters in light of the sheer magnitude of their failures after 1929.¹⁴ Histories of economic thought charted the growth of economics and statistics without necessarily highlighting the role economic forecasters played as active and even “performative” agents of economic knowledge.¹⁵ Even comparative studies of

¹¹ Mason, “Harvard Department of Economics,” 415.

¹² On economic cycles, see Arthur F. Burns and Wesley C. Mitchell, *Measuring Business Cycles* (New York: National Bureau of Economic Research, 1946); Irving Fisher, *Booms and Depressions* (New York: Adelphi, 1932); H. L. Moore, *Economic Cycles – Their Law and Cause* (New York: Macmillan, 1914); Wesley C. Mitchell, *Business Cycles: The Problem and its Setting* (New York: National Bureau of Economic Research, 1927); and Joseph A. Schumpeter, *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process* (New York: McGraw-Hill, 1939). On institutional change, see Thomas N. Carver, *The Present Economic Revolution in the United States* (Boston: Little Brown, 1925); and Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press, 1990). On American and foreign government agencies, see Charles A. Beard (ed.), *America Faces the Future* (Boston: Houghton Mifflin, 1932); Donald E. Moggridge (ed.), *The Collected Writings of John Maynard Keynes*, vol. XIV (London: Macmillan, 1973); and National Bureau of Economic Research, *NBER Bulletins, 1922-1933*. On the behavior of corporations and financial markets, see Louis D. Brandeis, *Business: A Profession* (Boston: Hale, Cushman and Flint, 1933); Arthur S. Dewing, *Financial Policy of Corporations* (New York: The Ronald Press Company, 1937); Benjamin A. Javits, *Business and the Public Interest* (New York, Macmillan, 1932); and Donald Mackenzie, *An Engine, Not a Camera: How Financial Models Shape Markets* (Cambridge, MA: MIT Press, 2006).

¹³ See Friedman and Schwartz, *Monetary History of the United States 1867-1960*, chapter 7.

¹⁴ See Galbraith, *Great Crash*; and Kindleberger, *Manias, Panics and Crashes*.

¹⁵ See for instance Morgan, *History of Econometric Ideas*. The concept of performativity will be further explored in Chapter 1 of this essay.

the Service and other economic forecasters, while excellent descriptively, at times neglected to analyze vital questions about their wider importance to economic histories of the period.¹⁶

Second, the historiography of Western geopolitics in the interwar period has underappreciated the importance of intellectual geopolitics. This idea centers on what the sociologist Donald Mackenzie described as “personal interconnections,” which layer and nuance readings of how economic power shifts within the nexus of government, academia, and business.¹⁷ Scholars have perhaps not written as cogently on such matters as they have, for example, on the dominance of American manufacturing and the expansion of American business interests abroad during the twentieth century. Moreover, intellectual geopolitics encapsulates a fascinating transition in how the Service was perceived and critiqued by the aforementioned nexus. Domestic critics of the Service expressed concerns at its ability to produce objective research whilst attempting to turn a healthy profit.¹⁸ By contrast, international critics preferred to challenge the economic theory underpinning the Service’s entire statistical method, countering with new, “national” conceptions of how economics ought to be approached and used by governments for the improvement of society.¹⁹ Both angles nonetheless place the Service front and center as an active and influential economic agent, without which the history of economic forecasting must be considered incomplete.

More broadly, this essay argues that the Service’s prominence during the 1920s constitutes evidence of a structural necessity the process of economic forecasting

¹⁶ See Friedman, *Fortune Tellers*, chapters 1-5.

¹⁷ Mackenzie, *Engine, Not a Camera*, 3.

¹⁸ Mason, “Harvard Department of Economics,” 414.

¹⁹ Morgan, *History of Econometric Ideas*, 66. For further details on Wagemann and the early history of the Institute for Business-Cycle Research, see Tooze, *Statistics and the German State*, 103-148.

acquired during this period. This allowed the institution of economic forecasting (although not necessarily forecasting organizations themselves) to survive the censure of critics during the Great Depression. While governments of the 1930s established themselves as the gatekeepers of such economic knowledge, it was in fact organizations like the Service that had first attuned societies to the immense potential of such knowledge. The survival and subsequent evolution of economic forecasting after 1929, both within the United States and abroad, evince the Service's and its contemporaries' undervalued positions within economic histories of the early twentieth century.

The two chapters that follow this Introduction shall, in turn, discuss the Service's importance in domestic and international contexts respectively. Chapter 1 highlights the Service's groundbreaking approach of presenting economic data in simple and compelling formats, earning the attention of businessmen and academics alike. Subsequently, Chapter 2 examines how the Service's establishment of an overseas network of contacts represented far more than an aim "to monitor business conditions throughout the world and share insight into local economic conditions."²⁰ In one of the most turbulent periods of the twentieth century, it seems appropriate to question: how strongly did economic forecasters like the Service influence Western powers' understanding of the geopolitical relationships they had consolidated at the close of the First World War? How, indeed, did nations' pursuit and internalization of economic forecasters' methods and theories—intellectual geopolitics—reflect a fundamental evolution in their conceptions of economic knowledge and economic power?

²⁰ Friedman, *Fortune Tellers*, 144.

Chapter 1: Economic Knowledge and Power

The discipline of economics as we know it today was in 1917 a disjointed collection of niche subjects.²¹ This was the broadest problem confronting the Service at its inception. Possessing *carte blanche* to pursue ambitious projects at the frontier of economics was of no use if the Service could not first unify these disparate subjects—political economy, statistics, business-cycle theory, and so on.

Unify them it did, however, and this is why the Service is a subject of tremendous historical import. Its ability to see the big picture of a burgeoning economic science manifested itself via a complex but cogent methodology, spanning two publications: the aforementioned *Review of Economic Statistics* and *Weekly Letters*. In these pages the Service laid out its core philosophy “to promote the collection, criticism, and interpretation of economic statistics, with a view to making them more accurate and valuable than they are at present for business and scientific purposes.”²² Additionally, the Service argued that an “Index of Business Conditions” could be devised using historical data series, in order to predict the outcome of present and future business cycles (Figure 1).²³ The Index was meant to be fundamentally predictive; that is, its troughs and peaks ought, the Service estimated, to conform approximately to the beginnings and ends of business cycles (spanning a length of about forty months).²⁴

²¹ For a detailed account of the development of economics as an academic discipline, see amongst others Morgan, *The History of Econometric Ideas*; Fourcade, *Economists and Societies*; and Weintraub, *How Economics Became a Mathematical Science*.

²² *Review of Economic Statistics* 1 (January 1919), 3.

²³ See Warren M. Persons, *Interpretation of the Index of General Business Conditions* (Cambridge, MA: Harvard University Press, 1922). Figure 1 shows the Service’s pre-war Index, constructed using eleven years’ worth of data (1903-14).

²⁴ Persons, *Index of General Business Conditions*, 6-8. For later defenses of the Index’s fundamental soundness, see C. J. Bullock and W. L. Crum, “The Harvard Index of Economic Conditions: Interpretation and Performance, 1919-31,” *Review of Economic Statistics* 14 (August 1932): 132-48; and C. J. Bullock et

Figure 1: The Index of General Business Conditions, 1903-14²⁵



If the Index of Business Conditions was the manifestation at large of the Service’s ideology, its A-B-C curves focused on the minutiae of business activity (Figure 2).²⁶ These three curves were in reality focused on the abstract concepts of “Speculation,” “Business,” and “Money”; but, catering to the elite of American industry, the Service found “A-B-C” a far simpler mnemonic for its purposes.²⁷ The concept underpinning these curves was sophisticated and indeed somewhat technical for its time, involving each curve’s incorporation of data series that were correlated via lags of three to six months.²⁸ Essentially, the Service argued that, *ceteris paribus*—wars and other large upheavals were no good for its method—any change in the Speculation curve (A) could

al., “The Construction and Interpretation of the Harvard Index of Business Conditions,” *Review of Economic Statistics* 9 (April 1927): 74-92.

²⁵ Persons, *Index of General Business Conditions*, 8.

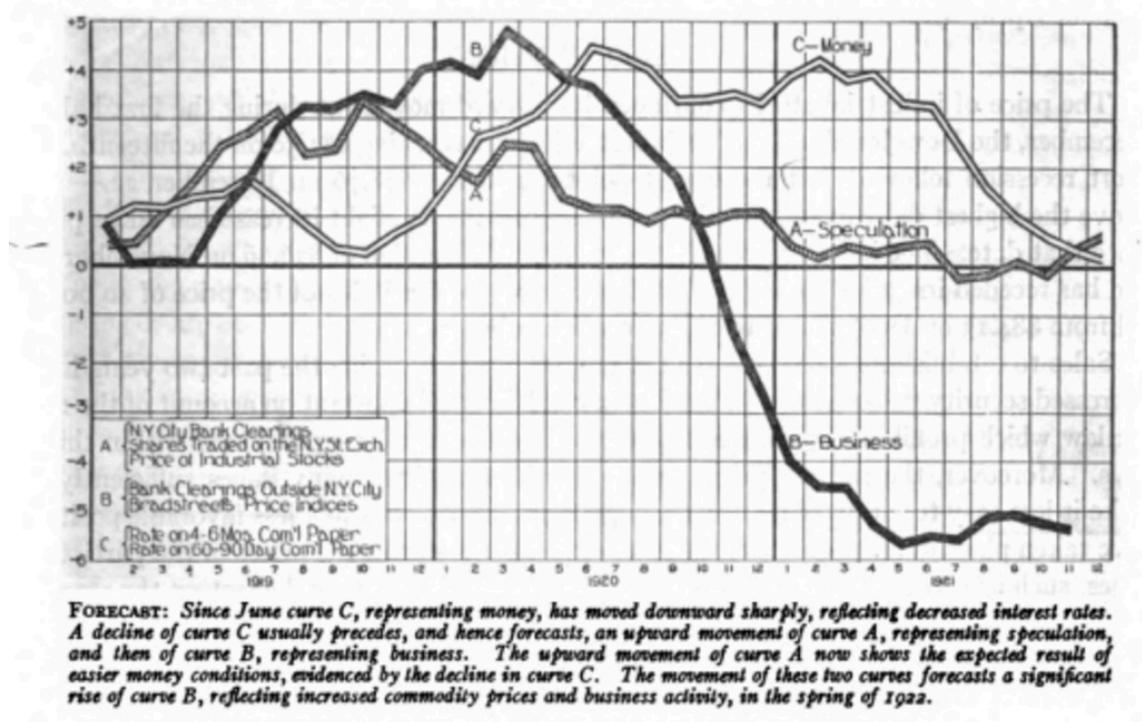
²⁶ Note also that the A, B, and C curves are part of Figure 1. The Index of Business Conditions was essentially a collective term use to describe the collation and interaction of the three curves.

²⁷ *Weekly Letters* 1 (January 1922), 3.

²⁸ Smith Jr., “A Study of the Harvard Economic Service,” 25.

predict a consequent change in the Business curve (B) within about six months; naturally, any change in the B curve would then predict a change in the Money curve (C).²⁹

Figure 2: A-B-C Curves, January 1922³⁰



Indeed, there was a deeply revolutionary aspect to how the Service collected and manipulated such data to suit its methods. To be sure, its approach was not always foolproof, particularly with the benefit of hindsight after 1929 and financial crises thereafter. Much has been already written about how, for instance, the Service chose to ignore wartime data because they did not mesh neatly with the calculations underpinning its methods at large.³¹ Even so, the Service’s standards for data collection remained

²⁹ Persons, *Index of General Business Conditions*, 7. On the subject of wartime data Persons remarked: “For the period of 1914-18 the Great War and government control of industry dislocated economic conditions to such an extent that the normal relations between speculation, business, and banking, which the Index shows to have obtained in time of peace, no longer existed; the chart for the war period is, therefore, not presented.”

³⁰ *Weekly Letters* 1 (January 1922), 3.

³¹ Friedman, *Fortune Tellers*, 137-40. The essence of this debate was that Persons, by omitting data from the First World War, had built up the Service around a fundamentally misleading economic philosophy.

incredibly rigorous by existing standards amongst early economic forecasters.³² In its earliest years, each of the Service's three curves made use of over ten different data series—whether the average of key industrial stocks; the average number of stocks traded on the New York Stock Exchange; or the rates on commercial paper maturing between anything from sixty days to six months.³³ In this vein the Harvard professor Charles J. Bullock, a founder of the Service and himself no expert in abstract statistics or mathematics, declared in 1928 that the Service had “already done a good deal to call economic theory down from the sky and make it travel along the solid highway of verifiable and measurable fact.”³⁴

More broadly, the Service benefited greatly from the prevailing attitudes of its time. The 1920s as a decade were commonly referred to in popular culture as the ‘Roaring Twenties,’ defined by excess, urbanization, and the pursuit of money and status.³⁵ There was no better time for producers of economic knowledge to thrive outside of academia, and this in fact is how one must read the Service's initial success. Akin to an “entrepreneurial adventure,” the young, wildcat industry of economic forecasting was

Persons provided an extensive justification for his decision, however, and criticizing him for an omission he had already admitted and argued for seems in my view a distraction from the real questions at hand. See Persons, *Index of Business Conditions*, 8-11.

³² Friedman, *Fortune Tellers*, 139.

³³ Smith Jr., “A Study of the Harvard Economic Service,” 25.

³⁴ Friedman, *Fortune Tellers*, 130. Bullock expressed this view when writing to Abbott Lawrence Lowell, Harvard's president at the time. For their exchange in full, see C. J. Bullock to Lowell, May 22, 1928, Call No. UIA5.160, folder 352, Records of President Abbott Lawrence Lowell (henceforth “Lowell Papers”). For more on Bullock's career at the Service and in Harvard's economic department see Mason, “Harvard Department of Economics, 407-08.

³⁵ The ‘Roaring Twenties,’ while very much a layman's representation of a complex period of economic development in the United States, must not be ignored as being itself an influencer of the historiographical debate surrounding economic forecasters in that period. This essay has endeavored thus far to show that existing views of economic forecasters were very much shaped by the catastrophic effect of widespread financial collapse in 1929. Some of the most well-known chronicles of the Roaring Twenties, like F. Scott Fitzgerald's *The Great Gatsby* (1925), produce in some ways an opposite effect. Instead of exposing the foibles of forecasters, Fitzgerald shrouds ‘money men’ in mystery, like Jay Gatsby and his associate Meyer Wolfsheim. (Neither view was helpful for contemporary economic forecasters attempting to legitimize their craft in wider society.)

dominated by large, sprawling organizations, notably those of Roger Babson (1875-1967) and John Moody (1868-1958).³⁶

The fiercely competitive environment of economic forecasting after the First World War might have at first glance seemed ill suited to a genteel, academic organization like the Service. To its credit, it quickly realized that what the earliest forecasters thrived on were aggressive salesmanship and a compelling (accurate or not) formula for making economic predictions.³⁷ Simultaneously, casual observers of the economy, more so than at any other time in history, became willing participants in the mania of speculation fueled by all kinds of economic agents, the Service included. “The striking thing about the stock market speculation of 1929,” wrote John Kenneth Galbraith, “was not the massiveness of the participation. Rather it was the way it became central to the culture.”³⁸ Most investors asked only the simplest of questions: where was the economy headed, which general factors were driving this economic direction, and—vitality—how could one profit from this knowledge?³⁹

Contrasting advertisements of the Service with Babson’s forecasting service in this period reveals much about this state of affairs (Figures 3 and 4). An advertisement for *Babson’s Reports* in the December 1922 edition of *Forbes* bore the usual hallmarks of ‘entrepreneurial’ (or, less charitably, quasi-scientific) forecasting, touting a high return on investment—forty percent—“without the risk, worry or loss of time involved in ordinary

³⁶ For details on Babson’s and Moody’s businesses see Friedman, *Fortune Tellers*, 12-50 and 86-117.

³⁷ John Moody’s forecasting service is profiled extensively in Friedman, *Fortune Tellers*, 86-117. His original endeavor survives as the rating agency Moody’s (which was during the most recent financial crisis embroiled in controversy related to its practices of issuing ‘safe’ or ‘triple-A’ ratings to various fundamentally high-risk securities).

³⁸ Galbraith, *Great Crash*, 83.

³⁹ Analogues today include current debates over the correlation of stock prices to oil, as well as market watchers’ general obsession with the minutiae of Federal Reserve statements and speeches.

speculation.”⁴⁰ By contrast, the Harvard advertisement in the same publication (lined up alongside Babson’s advertisement) highlighted everything distinct about the Service: in essence, a product that, while relatively youthful, was “the product of years of research in the field of economic statistics, [including] a new and scientific system of business forecasting of proven dependability since the close of the war.”⁴¹ The Service’s paying readers, the advertisement added, “were warned of the severe depression of 1920 fully six months before it occurred.”⁴²

⁴⁰ *Forbes*, December 9, 1922.

⁴¹ *Forbes*, December 9, 1922.

⁴² *Forbes*, December 9, 1922.

Figure 3: Ad for *Babson's Reports*, December 9, 1922⁴³

40% Profit

The average profit on all recommendations of the Babson Speculative Service since the beginning of the present period of accumulation, December 27, 1920—now stands 40%—on an average investment of 10 months.

Babson's REPORTS

If you would like a similar return on your money without the risk, worry or loss of time involved in ordinary speculation tear out the Memo—now—and hand it to your secretary when you dictate the morning's mail.

Booklet Free!

Your request will bring you full details of the Long Swing Method and booklet "Getting the Most from Your Money", which has solved the investment problem for over 17,000 of America's keenest investors.

Tear out the Memo—now

MEMO

For Your Secretary

Write the Babson Statistical Organization,
Wellesley Hills, 82, Mass., as follows:

Please send me Bulletin, A-1 and booklet "Getting the Most From Your Money"—*gratis*.



⁴³ *Forbes*, December 9, 1922.

Figure 4: Ad for the Harvard Economic Service, December 9, 1922⁴⁴

Harvard Economic Service

will enable you to make allowance in your own organization for future business conditions with a maximum degree of safety.

This Service is the product of years of research in the field of economic statistics, and includes a new and scientific system of business forecasting of proven dependability since the close of the war.

Subscribers were warned of the severe depression of 1920 fully six months before it occurred. They are now receiving forecasts of events for the coming months. Price \$100.00 a year.

*Write for Folder and Latest
Weekly Letters*

**HARVARD UNIVERSITY
COMMITTEE ON ECONOMIC
RESEARCH**

**109 WADSWORTH HOUSE,
CAMBRIDGE, MASS.**

Mention of "Forbes" insures good service

⁴⁴ *Forbes*, December 9, 1922.

Such language remained central to the Service's marketing efforts in the boom years of the 1920s. In 1923 the *New York Times* ran an advertisement claiming the Service's predictions had "anticipated every important business change, by from six to ten months," and that Person's methodology had "stood up under an eleven-year test" in demonstrating "a definite relationship in the speculative, commodity, and money markets."⁴⁵ The eleven-year test was essentially the same justification Persons had cited in the *Review of Economic Statistics* for his Index of Business Conditions, except made non-technical and attuned to the expectations of the Service's clientele.

The Service's performance up to that point seemed to justify Bullock's bullishness. It seemed to have achieved a perfect balance with the *Weekly Letters* and the *Review of Economic Statistics*; neither competed with the other for attention, but instead perpetuated extensive and mostly glowing commentary from both business and academic circles. Executives elsewhere who specialized in economic and statistical research were especially wont to "make regular use of the [Service's] publications."⁴⁶ Demand for the *Weekly Letters*, in particular, proved immense—between 1921 and 1924 subscriber numbers increased by more than two hundred percent, from 740 to 2,395.⁴⁷

Throughout this period, meanwhile, Babson remained stoically abrasive in his approach towards forecasting, opting not to adjust his methods whilst competing with the Service. His own methodology, encapsulated by what he termed the "Babsonchart," was exceedingly simplistic, highlighting an expected average or "normal line" (a straight line

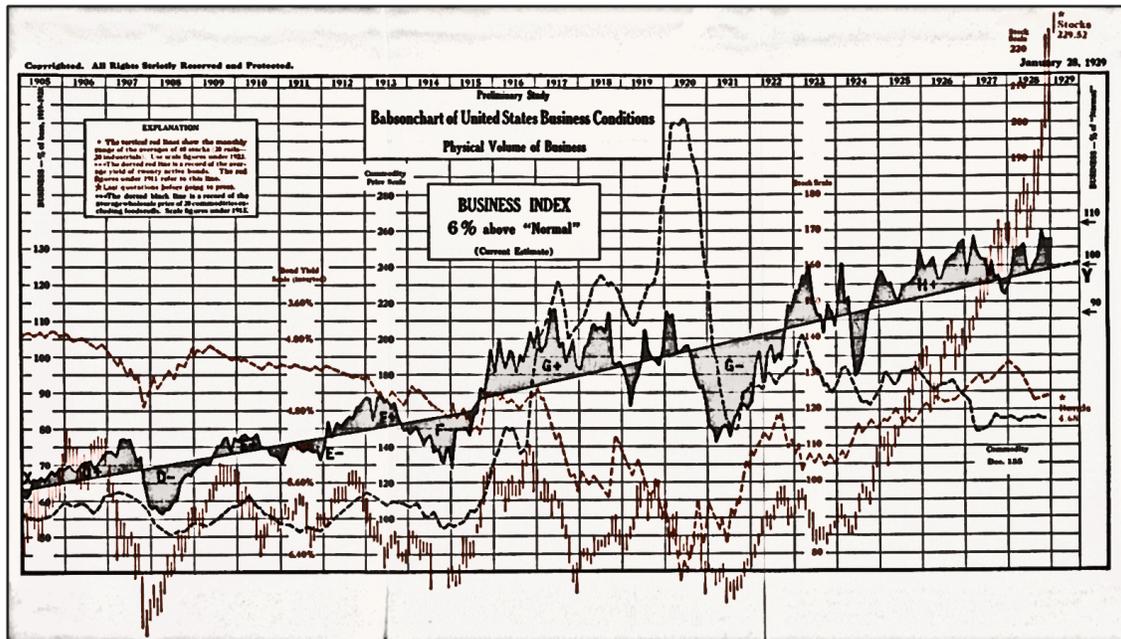
⁴⁵ See *New York Times*, October 5, 1923, 27.

⁴⁶ See "Report of the Work of the Harvard University Committee on Economic Research," Lowell Papers, box "Series 1919-1922," folder 310.

⁴⁷ Friedman, *Fortune Tellers*, 142.

bisecting the Babsonchart) that the economy was meant to trend towards—down, if economic activity was excessively bullish; and up, if it was excessively bearish (Figure 5).⁴⁸

Figure 5: Babsonchart of U.S. Business Conditions, January 28, 1929⁴⁹



In spite of these fundamental concerns, however, Babson remained throughout the 1920s a figure of considerable influence. It bears noting that the Service never attempted to challenge Babson’s superiority in terms of subscriber numbers.⁵⁰ In many ways Babson’s forecasting service symbolized society’s perceptions of economic forecasters in the early 1920s as compelling but unscientific sources of knowledge—gurus and prophet, as it were, rather than men of science.⁵¹ Such attitudes towards forecasters were

⁴⁸ See Roger W. Babson, *Business Barometers Used in the Management of Business and Investment of Money* (Babson Park, MA: Babson’s Statistical Organization, 1929).

⁴⁹ “Babsonchart of United States Business Conditions,” January 28, 1929, from Babson, *Business Barometers Used in the Management of Business and Investment of Money*, 152.

⁵⁰ See Friedman, *Fortune Tellers*, 142-43. In 1921 the Service had 740 subscribers, and 2,395 in 1924. However, Friedman noted, “even at its height...the Service had only one-fifth or one-sixth the subscribers that Moody or Babson could boast.”

⁵¹ Galbraith, *Great Crash*, 92.

especially prevalent amongst Wall Street insiders and the financial press. As one saying went, “Wall Street laughs at [prophecies], but it always reads them closely.”⁵² Babson’s continued influence on the profession of economic forecasting doubtless affected the prevailing historiographical conception of the Service as a similarly delphic kind of organization (when it was, by couching its forecasting opinions in statistical theory, attempting to do the precise opposite).

The second kind of opponent the Service faced in its mission to dominate the landscape of economic forecasting was more like itself at base—epitomized by the Index Number Institute (est. 1923), the forecasting service founded and led by the famous Yale economist Irving Fisher.⁵³ Fisher maintained a healthy if at times brusque relationship with Warren Persons, a statistician of comparable mathematical prowess whom the Service had hired in 1917 to develop its proprietary forecasting methods.⁵⁴ As speculative activity heightened in financial markets worldwide—nowhere more so than in New York—Fisher of all forecasters presented the freshest and most dynamic challenge to the Service. His reputation was on par with (and indeed exceeded) those of the Service’s top minds. Moreover, Fisher’s conceptualization of economic activity fundamentally challenged the Service’s ideology, in contrast to the superficiality of Babson and other “entrepreneurial” (quasi-scientific) forecasters.

⁵² See “The Financial Markets,” *New York Times*, January 3, 1898, 8.

⁵³ Irving Fisher (1867-1947) was a professor at Yale renowned for his work in mathematical economics, particularly index number theory—a subject Warren Persons also specialized in at Harvard and advanced through his work in statistics at the Service. For the academic debate on index number theory between Fisher and Persons, see Warren M. Persons, “Fisher’s Formula for Index Numbers,” *Review of Economic Statistics* 3:5 (May 1921), 103-113. For an example of Fisher’s work on the subjects of forecasting and stock market prediction, see Fisher, *Booms and Depressions*.

⁵⁴ Mason, “Harvard Department of Economics,” 415.

More than once, Fisher and Persons traded blows within the academe, as representatives of their respective organizations' economic ideologies.⁵⁵ One critique of the Service in 1926, nominally penned by Fisher's associate Karl Karsten (but almost certainly guided by Fisher himself), sought to unravel the Service's methodology entirely.⁵⁶ "The valuable A, B, and C curves of [the Service] are not, as hitherto there seemed good grounds for supposing, true 'lags' of each other," Karsten commented.⁵⁷

The Service, Karsten added,

could not be expected to note that these three curves belong to a certain category of peculiar paired-curves, because such a category was not generally recognized in economics when [the Service] formulated its methods. Yet the failure to notice this relationship introduces a large element of uncertainty into the Harvard forecasts.⁵⁸

The immediate fallout from Karsten's critique has been extensively documented elsewhere—suffice it to say that Bullock and Persons were not best pleased.⁵⁹

Organizations like the Service, in attempting to transform the profession of economic forecasting—and, by extension, the discipline of economics—thereby staked their reputations on experimental and incomplete forms of economic knowledge. This decision had the superficial and historiographically emphasized effect of exposing forecasters to the possibility of committing serious errors, most prominently in 1929. In this view, the objectivity of the Service rang hollow; that its "university setting, with high standards for objective research and far removed from the temptations of Wall

⁵⁵ See Persons, "Fisher's Formula for Index Numbers."

⁵⁶ See Karl Karsten, "The Harvard Business Indexes: A New Interpretation," *Journal of the American Statistical Association* 21 (December 1926): 399-418.

⁵⁷ Karsten, "A New Interpretation," 399.

⁵⁸ Karsten, "A New Interpretation," 401.

⁵⁹ Friedman, *Fortune Tellers*, chapters 2 and 4.

Street” merely enticed subscribers who understood too little of the Service, and valued too much of the Harvard name.⁶⁰

Writing about Harvard’s economics department as an insider, the academic Edward Mason seemed to brand the Service similarly—as an aberration and a distraction from the real goals of Harvard economists. The Service was, according to Mason, “the largest departmental research activity in the 1920s, loosely connected with the Department, but absorbing the time and energy of a number of faculty members.”⁶¹ Worse, however, was Mason’s skepticism of the entire enterprise as being fundamentally incoherent, comprising in his view “what were, at least for a university, two questionably compatible functions...[promoting] serious scientific research on economic trends and fluctuations and at the same time [providing] business with a short-term forecasting service.”⁶²

Most contemporary observers of the Great Crash tended to reflexively emphasize what they believed to have been the daftness of the entire enterprise of economic forecasting. In their view there was no question of legitimacy to dispute; from the beginning, all forecasters had pretended to possess economic knowledge they could not possibly access. A famous misstep by Fisher in 1929—who claimed, on the eve of the Great Crash, that “stock prices have reached what looks like a permanently high plateau”—was frequently applied to criticisms of the wider forecasting community.⁶³ Of the Service Galbraith pronounced, “Harvard economics professors ceased forecasting the

⁶⁰ Friedman, *Fortune Tellers*, 128.

⁶¹ Mason, “Harvard Department of Economics,” 414.

⁶² Mason, “Harvard Department of Economics,” 414.

⁶³ Galbraith, *Great Crash*, 75-76.

future and again donned their accustomed garb of humility.”⁶⁴ Most damningly, Harvard publicly disaffiliated itself from the Service after sustained pressure from alumni, one of whom wrote in the 1931 issue of Harvard’s *Alumni Bulletin*: “Would not Harvard University be wiser to discontinue its role as prophet and stick to education?”⁶⁵

Yet this kind of historiography lacked a deeper sense of perspective towards the work of economic forecasters like the Service. By hinging forecasters’ entire worth on a single if hugely catastrophic event, it examined them at their worst, as if trapped within a snapshot of inevitable collapse. Curiously, the same historiographical narrative treated the Great Crash itself in a far more nuanced manner. Galbraith in particular ventured to question widely embraced notions of the crisis’ buildup. Who, he asked, had actually gotten involved in the crisis and was responsible for the mass speculation of late 1928 leading into the summer of 1929, “a period when the popular folklore has Americans rushing like lemmings to participate in the market?”

In turn, Galbraith’s analysis revealed that popular belief was remarkably flawed. Only one and a half million people (out of the total U.S. population of one hundred and twenty million) involved at all in the speculative boom and bust—less than a single percentage point.⁶⁶ The story of economic forecasting carries a similar burden in popular culture, particularly when folded into historical retellings of the Great Crash or of the 1920s and 1930s in general. The barracking in public discourse of forecasters like the

⁶⁴ Galbraith, *Great Crash*, 151.

⁶⁵ Friedman, “Problems of Forecasting,” 59-60. See also Harvard *Alumni Bulletin*, 8 January 1931, 463-64, letter from William P. Everts, ’00. Although the Service had officially been made independent from the university in 1928 (due to similar concerns regarding a possible conflict of academic and business interests), the university’s response to Everts was the first time such a decision had been made public.

⁶⁶ Involvement in this case refers to people who held accounts at any of the twenty-nine U.S. stock exchanges in operation at the time. Even more tellingly, speculative activity was supremely concentrated in a single exchange—the New York Stock Exchange, or NYSE (1.37 million of the 1.5 million total involved). See Galbraith, *Great Crash*, 81-83.

Service, whatever the true nature or success rate of their methods, turned into a dominant message. And, as it turned out, this message lay completely at odds with economists' view that their subject was growing increasingly scientific and reliable—and, therefore, little exposed to human error and emotion.

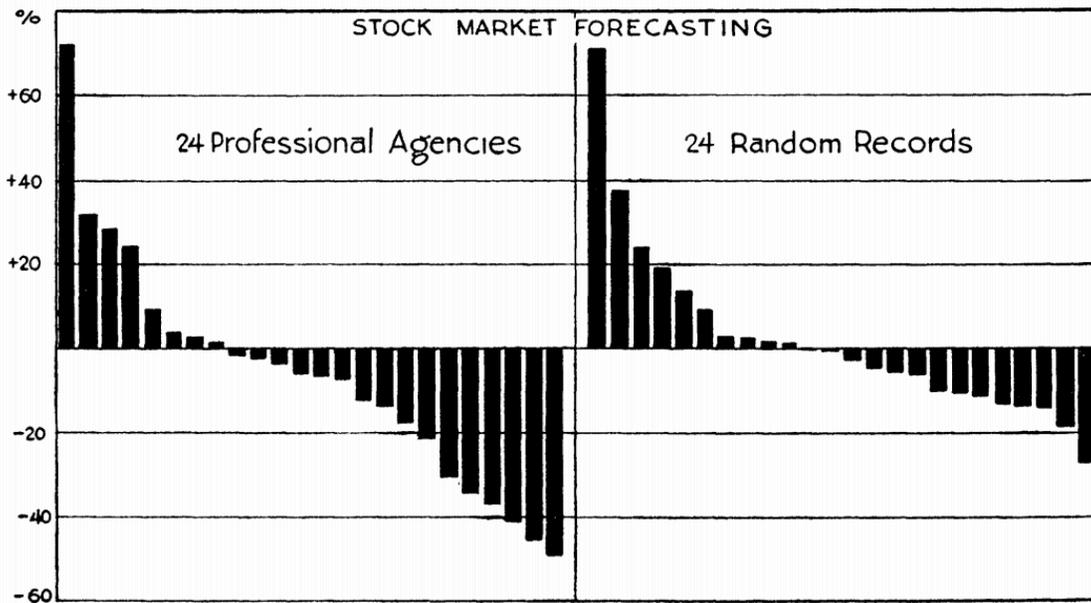
Many economists resolved this conundrum by defending the reputation of economic forecasting as a science; to do so, however, meant once again dismissing the “primitive” contributions of the Service and other early forecasters.⁶⁷ A particularly well-known example of this attitude manifested itself in 1933, with the economist Alfred Cowles' commissioning of a study titled, “Can Stock Market Forecasters Forecast?”⁶⁸ Cowles' conclusions in 1933 condemned the Service, by that point already defunct, to the lunacy fringe of economic thought. The *New York Times* reprinted Cowles' remarks that, in most cases, “drawing and shuffling cards, and buying and selling accordingly, would show a better record of stock market winnings than following the trail of the professional forecasters” (Figure 6).⁶⁹

⁶⁷ Friedman, *Fortune Tellers*, 202.

⁶⁸ Alfred Cowles III, “Can Stock Market Forecasters Forecast?” *Econometrica* 1 (July 1933): 309-24. Cowles (1891-1984), like the Service and others, had established a for-profit forecasting service; in similar vein, he had badly miscalculated in 1929. Thereafter he endeavored to understand exactly how he, the Service, and other forecasters had failed, by founding both Cowles Commission for Research in Economics and the academic journal *Econometrica*.

⁶⁹ “Rates Luck Above Wall St. Experts,” *New York Times*, January 1, 1933, 7.

Figure 6: Actual versus Hypothetical Forecasts, % Success Rate⁷⁰



At this juncture it can be conceded that it was not beneficial for most historians writing in the immediate aftermath of the 1920s to defend or exonerate economic forecasters. It was easier, and more elegant, to see the 1930s as a period of rebirth for both economic forecasting and the wider economy, led by truly unbiased forces—government agencies like the Federal Reserve and the National Bureau of Economic Research (NBER). Instead of Bullock, Persons, and Fisher, statesmen like Herbert Hoover and financially disinterested economists like Wesley Mitchell dominated perceptions of economic forecasting from this perspective.⁷¹ Mitchell, for instance, led research efforts at the NBER whilst also publishing a series of important studies on the subject of business-cycle theory.⁷² Meanwhile, the *Review of Economic Statistics*, which

⁷⁰ Cowles, “Can Stock Market Forecasters Forecast,” 320. See pp. 320-21 for a technical explanation of how these results were derived mathematically.

⁷¹ “Financially disinterested” in the sense that, unlike Bullock, Fisher, or Babson, economists like Mitchell did not have “skin in the game” contingent upon their expressing of one opinion or another.

⁷² See Wesley Mitchell, *Business Cycles: The Problem and its Setting* (New York: National Bureau of Economic Research, 1927); and Wesley Mitchell, “Quantitative Analysis in Economic Theory,” *American Economic Review* 15 (March 1925): 1-12.

could not be faulted for its academic bent, became instead framed by critics of economic forecasting as an outlet for Bullock, Persons, and other economists in the Service's employ to retrospectively frame their economic mistakes as motivated by intellectual curiosity or external circumstances, rather than financial profit.⁷³

There remains something amiss, however, even in this more nuanced narrative of economic forecasting. Appreciating the true motivations and impact of the Service requires a broader understanding of this period in history. Simultaneously, this understanding mandates a reframing of the Service's epistemic purpose in the context of not simply economic knowledge, but also economic power—its ability to spread such knowledge “performatively,” in the language of the sociologist Donald Mackenzie.⁷⁴ “In the case of the use of an economic model,” Mackenzie remarked, “one possibility is that economic processes or their outcomes are altered so that they better correspond to the model.” This type of performativity he termed “Barnesian” (strong).⁷⁵ On the other hand, by “generic” (weak) performativity Mackenzie simply meant that economic processes were used outside of the academe, in the so-called “‘real world’”: by market participants, policy makers, regulators, and so on.”⁷⁶

⁷³ See Mason, “Harvard Department of Economics,” 418. For further information see W. L. Crum and J. B. Hubbard, “A Review of the Year, 1932,” *Review of Economic Statistics* 15 (February 1933): 14-23.

⁷⁴ Performativity was a term coined by the philosopher J. L. Austin, who disdained the word but “thought [it] necessary to distinguish utterances that *do* something (performative utterances) from those that report on an already-existing state of affairs. If I say ‘I apologize,’ or ‘I name this ship the *Queen Elizabeth*,’ or ‘I bet you sixpence it will rain tomorrow,’ then ‘in saying what I do, I actually perform the action.’ See Mackenzie, *Engine, Not a Camera*, 16.

⁷⁵ Mackenzie, *Engine, Not a Camera*, 18-19. On this subject Mackenzie noted: “Let me call this possibility ‘Barnesian performativity,’ because the sociologist Barry Barnes has emphasized...the central role in social life of self-validating feedback loops...As Barnes notes, if an absolute monarch designates Robin Hood an ‘outlaw,’ then Robin *is* an outlaw. Someone is a ‘leader’ if ‘followers’ regard him or her as such. A metal disk, a piece of paper, or an electronic record is ‘money’ if, collectively, we treat it as a medium of exchange and a store of value.”

⁷⁶ Mackenzie, *Engine, Not a Camera*, 17-18.

In this vein early economic forecasters like the Service were important if prototypical examples of Barnesian performativity at work. The current historiography, in relegating them to the margins, effectively asserts that forecasters were only capable of generic performativity—that economic forecasters only intrinsically affected economic activity by performing forecasts, by saying something like “business conditions are likely to remain stable” (which they did in the summer of 1929, prior to the Great Crash).⁷⁷

Yet it is far more compelling in some sense to envision how, in the Barnesian case, the Service and its contemporaries reinvented the economic system at its core, in spite of forecasters’ collective failure in 1929. The following chapter explores two outcomes of this reinvention: (1) intellectual geopolitics, a reinvention of the mutual economic relationships between nations (particularly stemming from the academic sphere); and (2) economic modernity, a reinvention of the core tenets of economic life affecting the development of institutions and the speed of institutional change.⁷⁸

⁷⁷ See Harvard Economic Service, *Weekly Letters*, volume 8 (Cambridge: Harvard University Press, 1929).

⁷⁸ See North, *Institutions, Institutional Change, and Economic Performance*, chapters 1, 9, and 12. These concepts will be further explored in Chapter 2 of this essay.

Chapter 2: “Intellectual Geopolitics” and a New Economic Modernity

Histories of the interwar period have frequently concerned themselves with the notions of geopolitical shift, of grand bargains, great-power dynamics, and the efforts of great men.⁷⁹ The economic aspect of geopolitics in this period, however, has been significantly undervalued insofar as abstract economic ideas have proven less enticing subjects. Many studies have instead discussed tangible instances of “economic” geopolitics: the gold standard debate of the 1920s, for example, or Federal Reserve policy’s effect on prolonging and worsening the Great Depression in the 1930s.⁸⁰

This essay deliberately employs a more expansive term, “intellectual geopolitics,” to encapsulate the broader, more abstract, and more fundamentally important economic shift that took place on both sides of the Atlantic in the first half of the twentieth century. It begins at the turn of the twentieth century, a period on the cusp of intellectual and social change. Intellectually, debates over the future of economics had never proven more intense; moreover, the rapid growth of research universities and dedicated research institutions—as we have seen with the Service at Harvard—incubated economic ideas and organizations that flourished during the 1920s.⁸¹ Socially, mounting political instability in Europe boiled over during the First World War, allowing the United States to capitalize by exerting a growing influence on not merely military and political, but also

⁷⁹ In some sense this statement evokes the Great Man Theory, popularly summed by Thomas Carlyle as follows: “the history of the world is but the biography of great men.” Debated though this idea has been since the nineteenth century, one needs only to look at popular works today (such as Boris Johnson’s *The Churchill Factor*) to know that this seductive if necessarily reductive format of history remains popular today.

⁸⁰ See Friedman and Schwartz, *Monetary History of the United States 1867-1960*; and Reinhart and Rogoff, *This Time is Different*.

⁸¹ See Roger L. Geiger, *To Advance Knowledge: The Growth of American Research Universities, 1900-1940* (New York: Oxford University Press, 1986); and Fourcade, *Economists and Societies*.

economic affairs—both in terms of policy and of ideas.⁸² The academic Marion Fourcade, in particular, used this period to explain the “transnationalization of economics”: or, how economics “constantly constructs and reconstructs itself in the course of expanding its influence worldwide.”⁸³

Crucially, the narrative of intellectual geopolitics appreciates that beyond the specter of financial crisis in 1929 lay a deeper transition of economic power—in which governments replaced or co-opted economic forecasters as both the originators and managers of economic knowledge. It was shown in Chapter 1 of this essay that after the Great Crash it became common for critics of the Service and economic forecasters to denounce the knowledge they had produced as mere hocus-pocus.⁸⁴ Yet the same kind of knowledge continued to be propagated, and even more extensively so, by governments—not least the Hoover administration—well into the years of the Great Depression, after the Service had already expired. This situation was equally if not more prominent abroad, as state-run forecasting services throughout Europe continued to debate the Service’s methods in relation to “national” economic concerns—for instance, the German state’s movement towards the aggregation and generation of national statistics as opposed to mere data collection.⁸⁵

It proved illuminating that in late 1929, when public tolerance for forecasters’ knowledge ought to have been at its weakest, Mitchell—a key member of the government-backed National Bureau of Economic Research—remained defiant on the

⁸² Marion Fourcade, “The Construction of a Global Profession: the Transnationalization of Economics,” in *The Economics of Economists: Institutional Setting, Individual Incentives and Future Prospects*, eds. Alessandro Lanteri and Jack Vromen (New York: Cambridge University Press, 2014), 25-76.

⁸³ Fourcade, “Transnationalization of Economics,” 36.

⁸⁴ See Galbraith, *Great Crash*, 89-91.

⁸⁵ See Tooze, *Statistics and the German State*, chapters 3-5.

future of economic forecasting. “Government and business enterprises, mainly for their own ends,” Mitchell commented,

are making and publishing an ever-increasing array of records touching on an ever-increasing variety of human activities...the technique of statistical analysis is making rapid strides. It is inventing more powerful methods of breaking up the changes found in time series into the component elements, and it is becoming more critical of its data, and its tacit assumptions.⁸⁶

The U.S. government, until then the more passive and low-profile partner of for-profit forecasters such as the Service, thereafter reinvented itself as the main agent of both economic knowledge and power. It endeavored to expand the scope of data available for examination, on a scale dwarfing that of the Service or indeed any private forecasting service. More importantly, however, it was creating new data; not merely collecting it, as the Service had. The consequence of this push to actively create new data—in the form of national economic statistics such as Gross National Product (GNP)—was a broader, less short-term attitude towards the presentation of economic knowledge.

Vitaly, this situation proved an additional justification for the inherently trustworthy and scientific character of economic forecasting as practiced within and by government agencies. Unlike the Service and other for-profit forecasting services, economists at the National Bureau of Economic Research and the U.S. Department of Commerce had no bottom line to maintain—and, therefore, no incentive to downplay negative forecasts when businessmen preferred to receive reassurance and optimism. Rumors of this sort, in fact, had plagued the Service after the Great Crash.⁸⁷ One rumor told that, in the summer of 1929, the Service’s A-B-C charts had supposedly predicted an

⁸⁶ Dorfman, *Economic Mind in American Civilization*, 600. For further reading, see Wesley C. Mitchell, “Economics: 1904-1929” (1931), in Wesley C. Mitchell, *The Backward Art of Spending Money and Other Essays* (New York: McGraw-Hill, 1937); and Wesley C. Mitchell, “Science in Business,” Address at the Bureau of Personnel Administration, New York, February 14, 1929.

⁸⁷ See Katherine M. Dominguez et al, “Forecasting the Depression: Harvard Versus Yale,” *American Economic Review*, vol. 78 (September 1988): 595-612.

imminent economic downturn; but these “pessimistic findings” never appeared in the Service’s *Weekly Letters* of that period, for fear that negative forecasts could themselves “have an adverse effect on financial markets and economic activity.”⁸⁸

The larger point at stake here is that economic forecasting existed and participated in an age of immense intellectual expansion, not contraction, for the field of economics writ large. As people struggled to find answers to economic catastrophe, their impulse was understandably to blame forecasters like the Service, particularly for their domestic interventions, which had appeared to cause the shrinking of the American economy. Yet, especially on the international stage, the Service had on balance excelled as “the first forecasting enterprise to construct a truly international organization...[having] perceived the increasingly global nature of economic affairs.”⁸⁹ The *Harvard Alumni Bulletin* reported in October 1922 that the Service “has made a connection with a committee of distinguished British economists...By this and other steps the Harvard Service will make its business surveys and forecasts international in scope.”⁹⁰

Moreover, it was not an exaggeration to label the British economists as such: the founding members of the so-called London and Cambridge Economic Service included the influential economists William Beveridge and John Maynard Keynes.⁹¹ When, in 1929, the Bank of England appointed an American economic advisor, it was remarked that the appointment “evidenced the desire of powerful central banks to consult someone intimately acquainted with the American economy and the practice of the American

⁸⁸ Dominguez et al., “Forecasting the Depression,” 595.

⁸⁹ Friedman, *Fortune Tellers*, 144.

⁹⁰ *Harvard Alumni Bulletin* 25 (October 1922), 42.

⁹¹ *Harvard Alumni Bulletin* 25 (October 1922), 42.

monetary authorities.”⁹² Crucially, this state of affairs showed that the earliest efforts of American economic influence in Europe had started to bear fruit. Indeed, American economic might alone could not have been translated into intellectual influence without the presence of American intellectuals capable of producing prolific levels of work in the field of economics and statistics.

In retrospect, prior to 1929 the Service was almost single-handedly responsible for the exporting of American influence via economic channels at an institutional level. Only Irving Fisher of Yale came close in terms of economic ideas, and even then his Index Number Institute never achieved an international reputation that seriously rivaled the Service’s.⁹³ When it was written of American economic forecasters that they alone “developed a *weekly* service for sale to businesspeople, [and] were nearly the only ones to develop a for-profit service,” the organizations being referred to were in all likelihood limited to the Service and Babson’s forecasting service.⁹⁴

Nonetheless, the first signs of a formal divergence in opinion between the Service and its international partners appeared in 1924. Keynes, at the time significantly involved with the work of the London & Cambridge Economic Service (LCES), first broached the idea that governments could and ought to take on bigger roles in determining the course of national economic activity.⁹⁵ Bullock’s response to Keynes was friendly but firm, maintaining his belief that the Service’s work “has got to be rather along the line of interpretation and forecast than advocacy of policies.”⁹⁶ Over the course of the 1920s the

⁹² Dorfman, *Economic Mind in American Civilization*, 190.

⁹³ Friedman, *Fortune Tellers*, 140-45.

⁹⁴ Friedman, “Problems of Forecasting,” 59.

⁹⁵ The LCES was overall a smaller operation than its counterpart at Harvard, with about five hundred subscribers mostly based in Britain. For Keynes’ exchange with Bullock, see Friedman, *Fortune Tellers*, 146-47.

⁹⁶ Friedman, “Problems of Forecasting,” 59.

Service would grow familiar with this type of exchange, as their European analogues grew increasingly interested with “[envisioning] a public role for economic forecasting.”⁹⁷ (In a sense, this was Europe’s first response to the first wave of intellectual geopolitics arriving from the United States.)

As it were, many historians and economists recognized that the interwar period had radically shaped economic development not merely within nations, but between them. This would form the bedrock of economics’ involvement in the development and propagation of intellectual geopolitics out of the United States. “Following World War I,” wrote Dorfman, “there was a strong interrelation and mutual influence in the development of American and European economic thought, particularly in regard to such topics as business cycles, monetary policy, and international economics.”⁹⁸ Friedman, on the other hand, pointed out that the war had also created significant demand for practical, intuitively understood forms of economic knowledge—in other words, charts and graphs. At the beginning of the interwar period, “businesspeople could find statistics on...pig-iron production, crop output, and myriad other items. Charts made trends in this mass of data suddenly become visible. The more data available, the more trends were discernible.”⁹⁹

Although Friedman’s statement might be more easily connected to the real output of the Harvard Economic Service (its *Weekly Letters*), Dorfman’s comment is more illuminating in light of how one can perceive the Harvard Economic Service as a force of intellectual geopolitics. Economists—the upstart academics of the day—were gaining

⁹⁷ Friedman, “Problems of Forecasting,” 59.

⁹⁸ Dorfman, *Economic Mind in American Civilization*, 164.

⁹⁹ Walter A. Friedman, *Fortune Tellers: The Story of America’s First Economic Forecasters* (Princeton: Princeton University Press, 2014), 119.

momentum, influence, and legitimacy in wider society. To highlight the resultant “exchange of ideas” occurring at that time, Dorfman wrote:

Under the stimulus of the nation’s postwar leadership in world economic affairs...[many] economists turned their attention to the works of foreign economists and to such related disciplines as philosophy, psychology, sociology, history, law, and anthropology. The proponents of this broader view did not regard it as a counteraction or an alternative to specialization, but rather as a means of enhancing the benefits of specialization; that is, the exchange of ideas with workers in the other social sciences and with fellow economists abroad would supply a more rounded background for the specialized efforts of individuals in the profession.¹⁰⁰

The Service could not have been a better example of an economic organization of this type in the 1920s. As it were, in the course of the 1920s Bullock and company had “encouraged prominent economists in Europe to become interested in the practical study of business cycles,” establishing relationships with John Maynard Keynes, Ernst Wagemann, Friedrich Hayek, “and other leading figures...Hayek later recalled that ‘great fascination of course was exercised at the time by the attempts at economic forecasting, particularly the economic barometers of the Harvard Economic Service.’”¹⁰¹

Indeed it appeared that, the Service and Irving Fisher’s New Haven-based analogue aside, no economic forecasting organization of comparable size properly fits into Dorfman’s narrative. The services of Babson and Moody, for instance, were domestically well-known, but largely failed to exert any influence abroad. They were not interested, moreover, in producing an exchange of ideas—they were interested in transmitting their ideas in one direction for profit, from their statistical departments to consumers. Intellectual geopolitics did not suit such forecasters, who possessed no

¹⁰⁰ Dorfman, *Economic Mind in American Civilization*, 124.

¹⁰¹ Friedman, “Problems of Forecasting,” 58-59.

incentive, monetary or intellectual, to retool their methods—particularly not for an academic audience they knew had never rated their abilities to begin with.¹⁰²

This narrative therefore confronts a question we have already begun analyzing: why did historians so frequently conflate economic forecasters, when in reality they were so different? It was earlier suggested in this essay that a story of hubris was responsible, framing the failures of economic forecasters like the Service as part of a cautionary, moralistic message that needed to be simple. Effectively, it needed to parallel broader historical commentary on the panic of 1929 and the Great Depression. Even though the Service was, methodologically speaking, one of the most consciously scientific organizations of its era and field, it had locked horns with (and failed to best, in the context of predicting the events of 1929) its pseudo-scientific competitors. It could little benefit the contemporaneously writing historian to allot a grander role—for instance, in the context of intellectual geopolitics—to an organization like the Service, which seemed to have lost its way at the most basic level possible, and whose members seemed more easily caricatured than seriously profiled.¹⁰³

Yet, in the course of propagating economic knowledge across the Atlantic, the Service became the first and most intriguing emissary of a distinctly American brand of economic modernity, which in turn catalyzed the eventual divergence of many nations' state-backed forecasting services from the Service's model and methods. These new rivals, once almost unconditional admirers and imitators of the Service, now extensively

¹⁰² Friedman alludes to this in noting widespread if not uncritical support for Fisher's theories and their effect of "[increasing] the prestige of the forecasting industry"—but Fisher was not especially reciprocal, preferring instead to criticize the flaws of other forecasters, as "mere analysts of historical trends who inductively identified patterns in the past and projected them into the future." See Friedman, *Fortune Tellers*, 73-76.

¹⁰³ Mason, in particular, does not shy away from criticisms of Bullock and Persons that were not strictly related to their academic output.

debated it on how economics could and ought to be used for distinctly national ends.¹⁰⁴

This seems in hindsight a sort of belated reassertion of national character, as European countries realized the extent to which embracing the Service's methods meant exposing themselves to economic knowledge that functioned as a "technology of political and bureaucratic power...[and as] transnational linkages dominated by the United States."¹⁰⁵

Even contemporaneously, Professor Dr Ernst Wagemann, the leader of the Reich's Statistical Office and one of the founders of the *Institut für Konjunkturforschung*, or Institute for Business-Cycle Research in Berlin, had suggested that

approaches to statistical business cycle study could be characterised nationally: German economists viewed the economy from the point of view of a doctor dealing with a human patient while the Americans saw the economy as 'a powerful piece of machinery'... Wagemann claimed that the Russians viewed the economic system rather like the planetary system and adopted the statistical approach used in astronomy. As a result, some of their statistical work had a different flavour, and involved stochastic theory to help analyze the movement of economic variables.¹⁰⁶

Finally, as a direct result of the onset of this new economic modernity, economic forecasting agencies in various countries no longer functioned as simple analogues of each other, as was the case in the early 1920s. Instead, they both espoused and influenced national decision-making at the highest level. The Service, although defunct after 1931, had in the 1920s brought economic forecasting from the fringes of legitimacy to the very core of American government. The Federal Reserve and National Bureau of Economic Research, for instance, grew vitally important under the Hoover and Roosevelt administrations, and their leaders frequently shared "personal interconnections" with ex-

¹⁰⁴ See Friedman, *Fortune Tellers*, 144-55.

¹⁰⁵ Fourcade, "Transnationalization of Economics," 36.

¹⁰⁶ Morgan, *History of Econometric Ideas*, 66. For further details on Wagemann and the early history of the Institute for Business-Cycle Research, see Tooze, *Statistics and the German State*, 103-148. Wagemann's statement will be further unpacked in the following section on terminology.

stalwarts of the Harvard Economic Service.¹⁰⁷ Even the foreign economists who criticized economic forecasting broadly, such as Keynes and Oskar Morgenstern, nonetheless understood how the newfound necessity of forecasts in economic life could prove for further theoretical developments in economics. Indeed, they often chose to pursue those ends themselves—as Keynes did with his *General Theory of Interest*, and Morgenstern on the subject of game theory.¹⁰⁸ In this way economics flourished in the 1930s in ways completely unknown to society previously.

¹⁰⁷ See Brandes, *Herbert Hoover and Economic Diplomacy*.

¹⁰⁸ See Arthur W. Marget, “Morgenstern on the Methodology of Economic Forecasting,” *Journal of Political Economy* 37 (June 1929): 312-39; and Oskar Morgenstern, “Perfect Foresight and Economic Equilibrium,” in *Selected Economic Writings of Oskar Morgenstern*, ed. Andrew Schotter (New York: New York University Press, 1975), 169-83. On the subject of Keynes’s *General Theory of Interest* see John Maynard Keynes, *The General Theory of Employment, Interest and Money* (London: Macmillan, 1936). On the subject of Morgenstern and game theory see Oskar Morgenstern, “The Collaboration between Oskar Morgenstern and John von Neumann on the Theory of Games,” *Journal of Economic Literature* 14 (September 1976): 805-16.

Conclusion: The Structural Necessity of Economic Forecasting

The passing of the 1930s showed, more than ever before, the ubiquity of economic forecasting in daily life. It “was well entrenched in government and international agencies, financial institutions, investment houses, and virtually every division of corporations large and small.”¹⁰⁹ In 1938 *Forbes* paid economic forecasting perhaps its greatest compliment yet. “Business,” it remarked, “can no more do without forecasting than it can do without capital. From birth to death a business is the moving sum total of its adjustments to the future.”¹¹⁰

It is further appropriate to acknowledge intellectual frameworks that have influenced discussions in this essay of the relationship between institutions (like economic forecasting) and organizations (like the Service). The economist Douglass North wrote that “organizations and their entrepreneurs engage in purposive activity, and in that role are the agents of, and shape the direction of, institutional change.”¹¹¹ It follows that one simply cannot understand an institution as dynamically complex as economic forecasting by isolating and critiquing the organizations that have underpinned it at various times. In the broadest sense possible, paradigmatic shifts in economic thinking and behavior within societies cannot be understood without careful assessment of the institutions that underpinned economic life. Financial crises merit in themselves significant attention, but in the above mode of thinking they are merely symptoms of more fundamental change. The legacy of the Service appears small if its defunctness remains our focus, but enormous if one chooses instead to connect its early exploits and

¹⁰⁹ Friedman, *Fortune Tellers*, 202. Even after the Second World War, Friedman noted, this phenomenon did not abate. For instance, “a large firm like IBM would have dozens of economists on staff, all engaged in producing forecasts and other projections for the use of senior management.”

¹¹⁰ See “Forecasting Business,” *Fortune* 18 (October 1938): 66.

¹¹¹ North, *Institutions, Institutional Change, and Economic Performance*, 73.

popularity with the quantification, intensification, and ubiquity of economic concerns in modern life—the brand of economic modernity that only economic agents like the Service could have propagated and entrenched within society at large.

On balance, therefore, the Service has shown itself far more worthy of historical analysis than other organizations of its time (and, in fact, many of its successors). Economic forecasting could not have survived without it, but not for reasons one might think; most analytical perspectives on these subjects are flawed by their innate constraints. From a chronological perspective, one is likely to commit the error of condemning the Service to obscurity after 1929, a catastrophe from which it never recovered. From a domestic perspective, the Service yielded to the dominance of government and government-led agencies in the 1930s, as the American elite prioritized public-minded economic interventions in an era of rebuilding. And, from a geopolitical perspective, the Service’s initial influence on European forecasters seemed to wane as those organizations’ governments assumed control, directing their efforts towards different ends (and, with the onset of the Second World War, hostile ones). In the language of Mackenzie, these perspectives are all the products of cameras. They capture little (if any) of the “purposive” or “performative” nature of the Service on the development of economic forecasting, especially after 1929.

In the course of this work it has hopefully been shown that, at some essential level, the opposite is true—that the Service was and remains a vital case study for society today, which grapples perennially with so-called reiterations of old economic crises. Its approach towards both the academic study of economics and the production of economic knowledge for business purposes intertwined both types of output more closely than was

ever thought possible (or, indeed, acceptable). Its simultaneous focus on expanding its influence abroad allowed it to promote, for the first time, distinctly American methods of economic analysis, bucking (at least until its decline in 1931) a longtime trend of European dominance in the field of economic thought. By doing so, it effectively issued a challenge to European economists, none of who had thought to produce and market economic knowledge in the manner of the Service or its American rivals prior to the 1920s. By indirectly molding many of the early European forecasting services in its own image, the Service brought forth a prototypical but powerful form of American economic modernity to the Western world, beginning a new and globalized chapter of the institutionalization of economics.¹¹²

Moving forward, there are clear and important paths for further discussion. This essay has in some sense only sketched out the huge dimensions of the subject at hand—the relationship between an economy and its economic agents, conceptualized as historical and historiographical challenges to old ideas. Where North wrote,

I now turn to two fundamental questions of societal, political, and economic change. First, what determines the divergent patterns of evolution of societies, polities, or economies over time? And how do we account for the survival of economies with persistently poor performance over long periods of time?¹¹³

the same questions could be asked of economic forecasting and economic forecasters. How will societies continue to value the performance of economic forecasters, cognizant of the possibility that they might collectively underperform on the cusp of a period of economic crisis?¹¹⁴ Even more broadly, what implications might there be for the

¹¹² Fourcade, “Transnationalization of Economics,” 36-37.

¹¹³ North, *Institutions*, 92.

¹¹⁴ The sense of ‘valuation’ is meant here—in other words, society ‘prices in’ the possibility of mass failure, therefore making it rational in the interim to lean heavily upon forecasting knowledge that may turn out to be incorrect. Since the most recent financial crash, a significant amount of literature has been

relationship between economic forecasting and forecasters as the digital age's expansion into everyday life forces the streamlining of all kinds of information? How far would this force us to reconsider the value proposition of economic forecasters (as, amongst other things, aggregators of economic information)? If it could present in some sense a plateauing of forecasters' abilities to be performative agents, akin to the realization of the efficient-markets hypothesis, to what degree could there re-emerge an "end of economics" narrative in the same way some historians proposed an "end of history" narrative at the beginning of the post-Cold War World?¹¹⁵

Re-emerge, of course, because visions of an "economic problem" solved have appeared before—written, in the aftermath of the Great Crash of 1929, by no less a titan of early economic forecasting than John Maynard Keynes.¹¹⁶ One of the most poignant comments Keynes left to his readers occurred at the same time forecasters like the Harvard Economic Service (and Keynes' offshoot, the LCES) were beginning their retreat into relative obscurity:

The prevailing world depression, the enormous anomaly of unemployment in a world full of wants, the disastrous mistakes we have made, blind us to what is going on under the surface—to the true interpretation of the trend of things.¹¹⁷

Ironically, his words could not have been more relevant and invigorating for the cause of economic forecasters everywhere. As it were, in an age unprepared to acknowledge the

published aiming to show that prevailing models of gauging the risk levels of such information were overly optimistic, leaving economies open to shocks from events that seemed (per these models) statistical near impossibilities. See for example Nassim Nicholas Taleb, *Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007).

¹¹⁵ For examples of the "end of history" narrative, see Francis Fukuyama, *The End of History and the Last Man* (New York: Free Press, 1992).

¹¹⁶ See John Maynard Keynes, "Economic Possibilities for our Grandchildren," in Lorenzo Pecchi and Gustavo Piga, *Revisiting Keynes: Economic Possibilities for Our Grandchildren* (Cambridge, MA: MIT Press, 2008), 17-26.

¹¹⁷ Pecchi and Piga, *Revisiting Keynes*, 18.

pioneering work of forecasters and the figures behind them, those words found little support or solace.

Yet the impulse to interpret the economic world remains—and, in our day, it is stronger than ever. The leaders of the Harvard Economic Service, unlike Keynes, did not offer visions of the economic future, but it is difficult to imagine them having envisioned a society as obsessed as ours is with economic matters. In many respects it could not have been realized during their time that their work would be a key influence of the economic activity we see today: the forecasting departments of government agencies, banks, corporations, and modern-day Babsons offering their opinions on television and social media. It is the hope of this work that, gradually, they may be recognized in the canon of American economic history for the entirety of their work—and not merely for a collective, catastrophic failure in 1929, of which they were simply one part.

BIBLIOGRAPHY

Primary sources

Forbes

New York Times

Harvard Alumni Bulletin

Harvard Economic Service, *Review of Economic Statistics*

Harvard Economic Service, *Weekly Letters*

London and Cambridge Economic Service, *Monthly Bulletin*.

Records of President Abbott Lawrence Lowell, UAI 5.160, Harvard University Archives [Lowell Papers], series 1919-22, 1925-28, 1930-33.

Smith, Stacy H. "A Study of the Harvard Economic Service." Master's thesis, Stanford University, 1929.

Secondary sources

Babson, Roger W. *Business Barometers Used in the Management of Business and Investment of Money*. Babson Park, MA: Babson's Statistical Organization, 1929.

Beard, Charles A., ed. *America Faces the Future*. Boston: Houghton Mifflin, 1932.

Brandeis, Louis D. *Business: A Profession*. Boston: Hale, Cushman and Flint, 1933.

Brandes, Joseph. *Herbert Hoover and Economic Diplomacy*. Pittsburgh: University of Pittsburgh Press, 1962.

Bullock, C. J., and W. L. Crum. "The Harvard Index of Economic Conditions: Interpretation and Performance, 1919-31." *The Review of Economic Statistics* 14 (August 1932): 132-48.

Bullock, C. J., W. L. Crum, and W. M. Persons. "The Construction and Interpretation of the Harvard Index of Business Conditions." *The Review of Economic Statistics* 9 (April 1927): 74-92.

Burns, Arthur F., and Wesley C. Mitchell. *Measuring Business Cycles*. New York: National Bureau of Economic Research, 1946.

Carver, Thomas N. *The Present Economic Revolution in the United States*. Boston: Little Brown, 1925.

Cowles, Alfred, III. "Can Stock Market Forecasters Forecast?" *Econometrica* 1 (July 1933): 309-24.

Crum, W. L., and J. B. Hubbard. "A Review of the Year, 1932." *Review of Economic Statistics* 15 (February 1933): 14-23.

Dewing, Arthur S. *Financial Policy of Corporations*. New York: The Ronald Press Company, 1937.

Dominguez, Katherine M., Ray C. Fair, and Matthew D. Shapiro. "Forecasting the Depression: Harvard versus Yale." *American Economic Review* 78 (September 1988), 595-612.

Dorfman, Joseph A. *The Economic Mind in American Civilization*. New York: Viking Press, 1959.

- Fabricant, Solomon. "Toward a Firmer Basis of Economic Policy: The Founding of the National Bureau of Economic Research." Working paper, National Bureau of Economic Research, 1984.
- Fisher, Irving. *Booms and Depressions*. New York: Adelphi, 1932.
- Fitzgerald, F. Scott. *The Great Gatsby*. New York: Charles Scribner's Sons, 1925.
- Fourcade, Marion. *Economists and Societies: Discipline and Profession in the United States, Britain and France, 1890s to 1990s*. Princeton: Princeton University Press, 2009.
- . "The Construction of a Global Profession: the Transnationalization of Economics." In *The Economics of Economists: Institutional Setting, Individual Incentives and Future Prospects*, edited by Alessandro Lanteri and Jack Vromen, 25-76. New York: Cambridge University Press, 2014.
- Friedman, Milton, and Anna Schwartz. *A Monetary History of the United States 1867-1960*. Princeton: Princeton University Press, 1963.
- Friedman, Walter A. *Fortune Tellers: The Story of America's First Economic Forecasters*. Princeton: Princeton University Press, 2014.
- . "The Harvard Economic Service and the Problems of Forecasting." *History of Political Economy* 41 (2009): 57-88.
- Fukuyama, Francis. *The End of History and the Last Man*. New York: Free Press, 1992.
- Galbraith, John Kenneth. *The Great Crash 1929*. Cambridge, MA: Riverside Press, 1955.
- Geiger, Roger L. *To Advance Knowledge: The Growth of American Research Universities, 1900-1940*. New York: Oxford University Press, 1986.
- Javits, Benjamin A. *Business and the Public Interest*. New York: Macmillan, 1932.
- Johnson, Boris. *The Churchill Factor: How One Man Made History*. New York: Riverhead Books, 2014.
- Karsten, Karl. "The Harvard Business Indexes: A New Interpretation." *Journal of the American Statistical Association* 21 (December 1926): 399-418.
- Keynes, John Maynard. *The General Theory of Employment, Interest and Money*. London: Macmillan, 1936.
- . "Economic Possibilities for Our Grandchildren." In *Revisiting Keynes: Economic Possibilities for Our Grandchildren*, edited by Lorenzo Pecchi and Gustavo Piga, 17-26. Cambridge, MA: MIT Press, 2008.
- Kindleberger, Charles P. *Manias, Panics, and Crashes: A History of Financial Crises*. New York: John Wiley & Sons, Inc., 1996.
- Kondratieff, N. D. "The Static and the Dynamic View of Economics." *The Quarterly Journal of Economics* 39 (August 1925): 575-83.
- Mackenzie, Donald S. *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge, MA: MIT Press, 2006.
- Marget, Arthur W. "Morgenstern on the Methodology of Economic Forecasting." *Journal of Political Economy* 37 (June 1929): 312-39.
- Mason, Edward S. "The Harvard Department of Economics from the Beginning to World War II." *Quarterly Journal of Economics* 97:3 (August 1982), 383-433.
- Mitchell, Wesley C. *Business Cycles: The Problem and its Setting*. New York: National Bureau of Economic Research, 1927.
- . "Economics: 1904-1929." In Wesley C. Mitchell, *The Backward Art of Spending Money and Other Essays*. New York: McGraw-Hill, 1937.

- . “Science in Business.” Address at the Bureau of Personnel Administration, New York, February 14, 1929.
- . “Quantitative Analysis in Economic Theory.” *The American Economic Review* 15 (March 1925): 1-12.
- Moggridge, Donald E., ed. *The Collected Writings of John Maynard Keynes, vol. XIV*. London: Macmillan, 1973.
- Moore, H. L. *Economic Cycles – Their Law and Cause*. New York: Macmillan, 1914.
- Morgan, Mary S. *The History of Econometric Ideas*. Cambridge: Cambridge University Press, 1990.
- Morgenstern, Oskar. “Perfect Foresight and Economic Equilibrium.” In *Selected Writings of Oskar Morgenstern*, edited by Andrew Schotter, 169-83. New York: New York University Press, 1975.
- . “The Collaboration Between Oskar Morgenstern and John von Neumann on the Theory of Games.” *Journal of Economic Literature* 14 (September 1976): 805-16.
- North, Douglass C. *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press, 1990.
- Persons, Warren M. “The Construction of a Business Barometer Based Upon Annual Data.” *American Economic Review* 6 (1916): 739-69.
- . “Fisher’s Formula for Index Numbers.” *Review of Economic Statistics* 3 (May 1921): 103-13.
- . *Interpretation of the Index of General Business Conditions*. Cambridge, MA: Harvard University Press, 1922.
- . “Statistics and Economic Theory.” *Review of Economic Statistics* 7 (July 1925): 179-97.
- Pettee, E. W. “Short-Term Price Forecasting, 1920-29.” *Journal of Business of the University of Chicago* 9 (1936): 280-300.
- Reichmann, Werner. “Epistemic participation: how to produce knowledge about the economic future.” *Social Studies of Science* 43 (2013): 852-77.
- Reinhart, Carmen M., and Kenneth S. Rogoff. *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press, 2009.
- Schumpeter, Joseph A. *Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process*. New York: McGraw-Hill, 1939.
- Taleb, Nassim Nicholas. *Black Swan: The Impact of the Highly Improbable*. New York: Random House, 2007.
- Tooze, J. Adam. *Statistics and the German State, 1900-1945: The Making of Modern Economic Knowledge*. Cambridge: Cambridge University Press, 2001.
- Weintraub, Roy E. *How Economics Became a Mathematical Science*. Durham, NC: Duke University Press, 2002.