

## Keynes and Wall Street

This article examines in detail how John Maynard Keynes approached investing in the U.S. stock market on behalf of his Cambridge College after the 1929 Wall Street Crash. We exploit the considerable archival material documenting his portfolio holdings, his correspondence with investment advisors, and his two visits to the United States in the 1930s. While he displayed an enthusiasm for investing in common stocks, he was equally attracted to preferred stocks. His U.S. stock picks reflected his detailed analysis of company fundamentals and a pronounced value approach. Already in this period, therefore, it is possible to see the origins of some of the investment techniques adopted by professional investors in the latter half of the twentieth century.

**I**n 1925, when reviewing a study by Edgar Lawrence Smith, John Maynard Keynes revealed his attraction to common stock investing.<sup>1</sup> Challenging the conventional view that such stocks were too risky for general investors, he wrote:

The results are striking, [*sic*] Mr. Smith finds in almost every case, not only when prices are rising, but also when they were falling, that common stocks have turned out best in the long run. . . . This actual experience in the United States over the past fifty years affords prima facie evidence that the prejudice of investors and investing institutions in favour of bonds as being “safe” and against common stocks as having, even the best of them, a “speculative” flavor, has led to a relative overvaluation of bonds and undervaluation of common stocks.<sup>2</sup>

The Smith study, entitled *Common Stocks as Long Term Investments* (1924), provided the first quantitative evidence on the extra return to

<sup>1</sup> Edgar L. Smith, *Common Stocks as Long Term Investments* (New York, 1924).

<sup>2</sup> John Maynard Keynes, “An American Study of Shares versus Bonds as Permanent Investments,” *The Nation and the Athenaeum*, 2 May 1925, 157.

be gained from a diversified portfolio of common stocks compared with that on a portfolio of corporate bonds, over the period from 1866 to 1922. At the time, institutional investor portfolios such as those of U.S. university endowments were dominated by bonds, mortgages, and real estate and had a very low weighting in common stocks.<sup>3</sup> Today, in contrast, such investors characterized by a long-term investment horizon have a strong bias toward equity and equity-like investments.<sup>4</sup>

Prior research has shown that Keynes was an innovative investor. He was among the first to exploit the new forward exchange market when speculating in currencies for himself.<sup>5</sup> At King's College, Cambridge, he made a substantial allocation to U.K. ordinary shares for the endowment, while other Oxbridge colleges stuck with bonds and property.<sup>6</sup> This article aims to examine how Keynes approached investing on Wall Street. To what extent did he follow his own advice and invest in U.S. common stocks? From where did his investment ideas spring? And how did he navigate his way through the troubled waters of Wall Street after 1929?

We address these questions by exploiting the complete record of the transactions Keynes undertook when running the endowment of King's College. He also traded U.S. stocks for his personal portfolio.<sup>7</sup> However, these latter records are not as easily understood as those of his college, where he reported regularly on the endowment to the investment committee and the fellowship of King's. Nonetheless, a comparison of the U.S. stocks in Keynes's personal portfolio with those of the King's endowment shows that they held largely the same stocks. That is, over the period from 1930 to 1946, four out of every five U.S. stocks Keynes picked for himself were also held by the college endowment. It is also worth stressing that he appeared to take as much care with King's money as he did with his own.

<sup>3</sup>William N. Goetzmann, John Griswold, and Yung-Fang (Ayung) Tseng, "Educational Endowments in Crises," *Journal of Portfolio Management* 36 (Summer 2010): 112–23.

<sup>4</sup>David F. Swensen, *Pioneering Portfolio Management*, 2nd ed. (New York, 2009).

<sup>5</sup>Olivier Accominotti and David Chambers, "If You're So Smart: John Maynard Keynes and Currency Speculation in the Interwar Years," *Journal of Economic History* 76 (June 2016): 342–86.

<sup>6</sup>David Chambers and Elroy Dimson, "Retrospectives: John Maynard Keynes, Investment Innovator," *Journal of Economic Perspectives* 27 (Summer 2013): 213–28; David Chambers, Elroy Dimson, and Justin Foo, "Keynes, King's and Endowment Asset Management," in *How the Financial Crisis and the Great Recession Affected Higher Education*, ed. Jeffrey R. Brown and Caroline M. Hoxby (Chicago, 2014), 127–50.

<sup>7</sup>Keynes gained some experience trading U.S. stocks for his own account prior to the 1930s. In 1911, U.S. Steel common stock became his first U.S. investment, which he traded actively for several years after that. In 1926–1927, he invested in Kennecott Copper, but this was his only U.S. holding in a portfolio of twenty stocks with a weighting of around 4 percent.

His first foray into U.S. common stocks for King's was in April 1929, when he purchased one hundred shares of Massey Harris at \$51 per share, only to sell them at a small loss in August. While he made further purchases immediately after the crash in October, he sold in the months that followed, suffering modest losses. He did not return in earnest to investing on Wall Street until 1931–1932; then, he continued his buying until the end of 1937. Stock lists, transaction sheets, correspondence, and research reports from stockbrokers as well as archival material describing his U.S. visits allow us to document the evolution of his U.S. investment portfolio.

The findings of our study are threefold. First, notwithstanding the attractions of common stock investing, Keynes invested as much in preferred stocks as he did in common stocks. Wall Street in the 1920s and 1930s offered a degree of investment choice that we do not see today. Starting in the middle of the twentieth century, preferred stocks have largely disappeared both from investor portfolios and corporate balance sheets. Second, Keynes placed great store in fundamental security analysis. He was an enthusiastic consumer of stock research and undertook meetings with policymakers and with management of the companies in which he invested. As with his U.K. stocks, his U.S. stock portfolio displayed a pronounced tilt toward value stocks and did not merely mimic the market. Hence, the core of his portfolio focused on investment trusts, industrials, and public utilities; he largely avoided banking and finance and railroads. Last, Keynes employed a value approach to investing in U.S. stocks. Of course, he was not alone in pursuing such an approach. Most celebrated among his peers is Benjamin Graham, investor, Columbia Business School finance professor and co-author with David Dodd of the canonical *Security Analysis* (1934), and author of a series of articles entitled “Is American Business Worth More Dead Than Alive?” published in *Forbes* magazine in 1932.<sup>8</sup> In the latter, Graham set out his thoughts on why the stock market values of many U.S. corporations had fallen well below their liquidation values by 1932. Although the two men corresponded on currency issues near the end of Keynes's life, to the best of our knowledge, Keynes developed his investment philosophy seemingly without being aware of the approach of this fellow value investor.

Much has been written about the 1929 Wall Street Crash and its aftermath.<sup>9</sup> The prior literature tends to look at the aggregate market behavior, swept along by successive waves of extreme optimism and

<sup>8</sup> Benjamin Graham, “Is American Business Worth More Dead than Alive?,” *Forbes*, 1 and 15 June and 1 July 1932; Benjamin Graham and David Dodd, *Security Analysis* (New York, 1934).

<sup>9</sup> Maury Klein offers a good summary of this extensive literature, in *Rainbow's End: The Crash of 1929* (New York, 2001).

then pessimism. In contrast, few detailed studies exist of how investors behaved during this period of market turbulence. One important contribution of this article, therefore, is to start to fill this gap. In the process of doing so, we are able to detect the origins of some of the investment techniques adopted by institutional investors in the latter half of the twentieth century—fundamental security analysis and investor meetings with company management, economists, and policymakers.

A second important contribution of this study is to make the connection between Keynes's activities as an investor and his economic writings. Chapter 12 of *The General Theory* sets out Keynes's views on the relationship between the stock market and the macroeconomy.<sup>10</sup> In many ways, this chapter is an early treatise on behavioral finance. Here, the reader will find the "beauty contest" analogy explaining the mass psychology of the market as well as the often-quoted sentence, "Worldly wisdom teaches us that it is better for reputation to fail conventionally than to succeed unconventionally."<sup>11</sup> Both passages highlight the tendency toward herding that can occur in stock markets, then and now, among individual and institutional investors alike. Such irrational behavior can frustrate the more considered approach of the "long-term investor" looking to investment fundamentals for guidance in stock selection. It is in this same chapter that we also encounter Keynes's reference to the concept of "animal spirits" and to its influence on decision making by firms and investors. These are important observations that continue to inspire behavioral economists today.<sup>12</sup>

### The Evolution of Keynes's U.S. Investments

Keynes wore many hats as an investor. As well as investing his own money and that of his family and friends, he also advised his college, two insurance companies, Eton School, and a London-listed closed-end fund, among others. Having become a fellow of King's College in 1909, he subsequently became first bursar, in 1921, and managed the college endowment fund continuously until his death, in 1946. This role was closest to his heart, and he used it to make substantial investments in the United States during the 1930s.

King's was one of eighteen Cambridge colleges with their own endowments at this time, and the third wealthiest. The university had its own endowment and Keynes played no formal role in managing these

<sup>10</sup> John Maynard Keynes, *The General Theory of Employment, Interest and Money* (London, 1936).

<sup>11</sup> *Ibid.*, 156, 158.

<sup>12</sup> George A. Akerlof and Robert J. Shiller, *Animal Spirits: How Human Psychology Drives the Economy and Why It Matters for Global Capitalism* (Princeton, N.J., 2009).

assets. The annual investment reports of the King's College endowment, written by Keynes for the college fellowship, together with year-end lists of security holdings and transactions sheets are kept in the King's College archives. Like many of the older Oxbridge colleges, King's had been a large real estate owner since its foundation, and this asset class still dominated the endowment when Keynes took charge. As bursar, he reported on the securities in the portfolio separately from the real estate holdings and in considerably more detail. Real estate valuations based on market prices were not undertaken during his time. Consequently, we are only able to estimate a market value with any degree of accuracy for the securities in the endowment. The value of all securities held by the college endowment grew from £285,000 in August 1921 to £1,252,000 in August 1946 at market prices (unadjusted for inflation) through a combination of investment performance and cash inflows.<sup>13</sup>

Within the college's overall security portfolio, Keynes managed the Discretionary Portfolio, which he deemed was free from the restrictions of the United Kingdom's Trustee Acts and where he had full discretion to invest heavily in U.K. equities beginning in the 1920s.<sup>14</sup> The benefit of the decision to invest in U.K. equities is illustrated by the superior performance of the Discretionary Fund, with its heavy allocation to stocks, in comparison with that of the Restricted Fund limited to fixed-income investments.<sup>15</sup> Over the twenty-five years during which Keynes was responsible for the endowment, the average annual total returns on the Discretionary Fund, the Restricted Fund, the U.K. stock market, and the U.K. government bonds were, respectively, 16 percent, 6.8 percent, 10.4 percent, and 7.1 percent.

Keynes's allocation to U.S. stocks within the Discretionary Fund averaged 33 percent through the 1930s, reaching a maximum of 50 percent in 1939. Shortly thereafter, in January and April 1941, the U.K. Treasury requisitioned close to three-quarters of his U.S. stocks by value in order to boost its U.S. dollar reserves. Hence, Keynes made a substantial allocation to the U.S. market within the Discretionary Fund and was rewarded with strong performance, albeit not quite as strong as if he had left his portfolio invested entirely at home. The fund's overall return was 16.5

<sup>13</sup> The first market valuations of property were not carried out until the early 1960s. Based on a very rough guess of its market value in 1919, real estate accounted for approximately 80 percent of the King's endowment when Keynes took up the reins. By 1946, this allocation had dropped to around 50 percent, through both Keynes's policy of property disposals and the strong performance of the stock-laden Discretionary Fund. See Chambers, Dimson, and Foo, "Keynes, King's."

<sup>14</sup> David Chambers, Elroy Dimson, and Justin Foo, "Keynes the Stock Market Investor: A Quantitative Approach," *Journal of Financial and Quantitative Analysis* 50 (Aug. 2015): 843–68.

<sup>15</sup> Chambers, Dimson, and Foo, "Keynes, King's," 127–50.

percent between September 1930 and August 1946, the period during which Keynes invested in the United States. While his U.K. stocks performed about 1 percent better than this figure, his U.S. stocks returned a little over 1 percent less than the overall fund return. Part of this difference was attributable to the depreciation in the U.S. dollar against sterling over this period.

Having dipped a toe into the stock market in 1929, Keynes withdrew it in the months that followed, only returning in 1932–1933 and then buying in greater amounts in 1934, 1935, and 1936. Robert Shiller and Ali Kabiri have each furnished evidence suggesting that the market was considerably undervalued by the summer of 1932.<sup>16</sup> Contemporary accounts such as those of Benjamin Graham also reflected this view.<sup>17</sup> Keynes seems to have shared this opinion and, more importantly, acted on it.

The detailed security transaction sheets enable us to trace Keynes's net purchases (sales) of U.S. securities on behalf of his college quarter by quarter and compare them to the movements in the U.S. stock market (Figure 1). The bars represent Keynes's quarterly net purchases and sales from 1929 to 1946; the line depicts the U.S. market index described by the Cowles Index.<sup>18</sup> The figure shows that Keynes began to invest when the market was at a low point between 1932 and 1934. The sharp fall in Wall Street in 1937–1938 appears to have caught him somewhat unawares. Despite some turnover of the portfolio, in the main, he stuck to his stock positions. In general, his trading in the 1930s displays a somewhat contrarian approach. Subsequently, the two occasions when he was forced by the U.K. Treasury to sell stocks in 1941 clearly stand out. Thereafter, Keynes held his remaining investments and was largely inactive.

We valued all of Keynes's U.S. securities at market prices by sourcing common stock prices and dividends from the Center for Research in Security Prices (CRSP) and hand collecting preferred stock prices from

<sup>16</sup> Robert J. Shiller, "Do Stock Prices Move Too Much to Be Justified by Subsequent Changes in Dividends?," *American Economic Review* 72 (June 1981): 421–36; Robert J. Shiller, *Irrational Exuberance* (Princeton, N.J., 2000), 186; Ali Kabiri, *The Great Crash of 1929* (Basingstoke, U.K., 2014), 180–81.

<sup>17</sup> Graham, "American Business."

<sup>18</sup> See Shiller's website, at <http://www.econ.yale.edu/~shiller/data.htm>. The Cowles Commission for Research in Economics published a monograph in 1938 on indexes for U.S. common stocks. The full series covers the years 1871 to 1937. Data from 1917 are taken from the "Standard Statistics weekly indices" and represent 90 percent of all common stocks listed on the New York Stock Exchange. We use the P-1 series (ALL STOCKS). This value-weighted index has been used by William Goetzmann and Roger Ibbotson, in *The Equity Risk Premium: Essays and Explorations* (New York, 2006). For further discussion, see G. William Schwert, "Indexes of U.S. Stock Prices from 1802 to 1987," *Journal of Business* 63 (July 1990): 399–426.

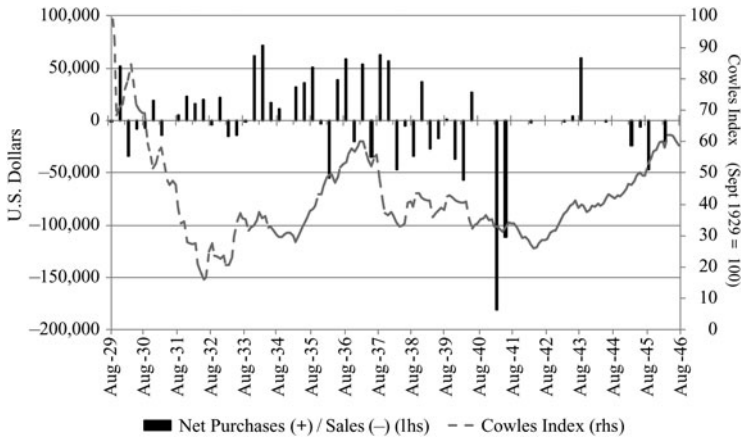


Figure 1. Keynes's purchases and sales of U.S. securities held by King's College, 1929–1946. The bars indicate the net purchases and sales at a quarterly frequency in USD (left-hand scale [lhs]) over each financial year ending August. The gray line (right-hand scale [rhs]) indicates the movement of the overall U.S. stock market represented by the Cowles Index (1938) rebased to 100 in September 1929. (Source: Authors' calculations.)

the *Commercial and Financial Chronicle*.<sup>19</sup> Dividends and arrears for preferred stocks were collected from *Moody's Manual of Investments*.<sup>20</sup> All prices are end-of-month closing midmarket prices, and in the absence of a bid-ask quotation, the average of the daily high and low is taken.

Table 1 summarizes the total value of the U.S. securities held by King's, the number of stocks held, and the percentage weighting by type of security and by sector for each financial year, ending in August, from 1930, the first year end for which U.S. investments were reported, up to 1946, the year of Keynes's death. The number of his U.S. security holdings peaked at forty-five in August 1939, and the market value of his U.S. holdings reached close to \$800,000 in August 1936.

<sup>19</sup> Calculated based on stock price and dividend data downloaded from Center for Research in Security Prices (CRSP), Stock/Security Files ©2015, University of Chicago Booth School of Business, <http://www.crsp.com/>. *The Commercial and Financial Chronicle* (New York, various issues from 1929 to 1946).

<sup>20</sup> John Moody, *Moody's Manual of Investments, American and Foreign, Railroad Securities* (New York, various issues from 1929 to 1946), *Moody's Manual of Investments, American and Foreign, Industrial Securities* (New York, various issues from 1929 to 1946), *Moody's Manual of Investments, American and Foreign, Public Utilities* (New York, various issues from 1929 to 1946); *Moody's Manual of Investments, Banks – Insurance Companies – Investment Trusts – Real Estate – Finance and Credit Companies* (New York, various issues from 1929 to 1946).

*Table 1*  
U.S. Security Holdings Held by King’s College, Cambridge, 1930–1946

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
No. of security holdings	2	4	16	12	37	41	39	33	43	45	37	20	22	23	22	23	19
Market value (US\$ thousands)	9.9	17.6	97.3	110.9	248.1	495.7	789.8	701.6	557.1	532.2	433.9	139.7	102.7	241.3	288.8	317.5	290.2
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Common stocks	61.1	100.0	72.4	57.3	42.9	28.5	36.6	46.8	39.7	45.0	35.1	28.6	29.0	22.6	21.8	34.8	37.7
Preferred stocks	38.9	0.0	4.2	26.3	51.3	65.8	60.1	52.5	56.1	51.1	59.0	50.2	51.0	41.0	43.9	32.1	35.0
Bonds	0.0	0.0	23.4	16.4	5.8	5.7	3.3	0.7	4.2	3.9	5.9	21.2	20.1	36.4	34.3	33.1	27.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Banks & finance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	7.2	8.1	5.3	9.9	1.8	4.6	4.2	4.3	5.6
Investment trusts	0.0	100.0	50.5	30.0	26.0	26.4	25.3	21.7	20.4	19.8	22.7	23.2	24.9	20.1	23.9	27.9	35.4
Industrials	38.9	0.0	8.1	46.7	42.3	38.7	24.0	29.0	30.2	32.5	24.0	30.1	34.1	17.8	16.7	24.3	21.8
Public utilities	0.0	0.0	14.3	5.8	22.9	27.5	44.3	41.6	37.3	34.3	41.6	15.5	15.3	18.6	18.8	7.7	7.0
Railroads	61.1	0.0	11.1	2.5	7.2	6.6	6.0	1.2	4.4	5.0	6.0	20.6	23.9	12.6	12.6	13.4	11.0
Sovereign	0.0	0.0	16.0	15.1	1.5	0.7	0.4	0.5	0.6	0.3	0.4	0.6	0.0	26.3	23.8	22.4	19.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Authors’ own calculations.

Notes: No. of security holdings and market value refer to the U.S. securities held by the college at each financial year end (August). All percentage figures are based on the market value of all U.S. security holdings. Common and preferred stocks are classified into sectors according to Moody’s manuals.



Keynes's U.S. Stock Picks

What kinds of stocks did Keynes favor? We first look at the types of securities and the sectors in which he invested and then consider whether he preferred value or growth stocks and small or large capitalization stocks.

Given his self-declared enthusiasm for common stocks, perhaps the most surprising finding, shown in [Table 1](#), is the fact that the average allocation to preferred stocks (44 percent) was very similar to that of common stocks (42 percent) across the whole period from 1930 to 1946. He began in 1935 to build large positions in Associated Dry Goods 2nd preferred stock and subsequently in Chicago Pneumatic Tool 3 percent cumulative convertible preferred stock. However, it was in the public utilities sector in particular that he favored preferred stocks, including Electric Power and Light (EPL) 6 percent preferred stock, EPL 7 percent preferred stock, and United Gas 7 percent preferred stock. In so doing, he avoided EPL common stock entirely and purchased United Gas common stock only in 1939.

Keynes's correspondence with his U.S. advisers regarding these firms helps us understand why he believed that these preferred stocks were undervalued relative to their common stock counterparts. He surmised that the potential return to preferred stocks in the early 1930s was twofold—a potential income gain from the resumption of dividend payments and a capital gain from a narrowing in their discount to par value. Other things being equal, preferred stocks—being without voting rights and without any claim to the residual cash flows of a firm—tend to trade like bonds. Furthermore, preferred stock dividends are paid before common stock dividends and provide a more secure income stream in uncertain times. Normally, therefore, one would expect such preferred stocks to trade like bonds somewhere near their par value, typically one hundred dollars, in the absence of a sustained rise in the general level of interest rates. Yet, when Keynes initiated his positions in 1932–1933, his preferred stocks traded at a 58 percent discount to par value on average.

Such large discounts are explained by the difficulties firms had in paying preferred dividends in the aftermath of the 1929 Crash and with the onset of the Great Depression. The high level of corporate debt in real terms by the early 1930s combined with declining corporate earnings meant that cash flows were in many cases insufficient to service preferred stock dividends, which ranked below interest on debt.<sup>21</sup>

<sup>21</sup> Leonard Kuvin, *Private Long-Term Debt and Interest in the United States* (New York, 1938).

Consequently, concerns about the ability of firms to pay dividends weighed heavily on their preferred stock prices.

Keynes was attracted to those preferred stocks where dividends were in arrears; EPL 6 percent, EPL 7 percent, and United Gas 7 percent had arrears amounting to \$17.50, \$20.50, and \$21.60 per share, respectively, when Keynes began investing in a substantial way in 1935.<sup>22</sup> In the former two cases, these amounts were approximately equivalent to the then prevailing stock price. His belief was that the market would come to realize these dividend arrears would at some stage be paid and, as a result, their depressed prices would rally—and this is what happened. By 1936, the average discount on Keynes's preferred stocks had narrowed to 26 percent as their stock prices rallied back toward par.

Turning to the sector breakdown of his U.S. investments, it is clear that Keynes concentrated his U.S. portfolio in three sectors: investment trusts, industrials, and public utilities.<sup>23</sup> His average weighting in these sectors was 29 percent, 27 percent, and 21 percent, respectively (Table 1). Unfortunately, a lack of data on sector weights for the U.S. stock market in this period makes it difficult to know how Keynes's portfolio compared. However, the fact that King's had very little invested in two important sectors—banking and finance and railroads—suggests that, in all likelihood, Keynes constructed a portfolio that differed substantially from the overall market.

There are two possible rationales for his favoring investment trusts. These trusts offer a diversified basket of stocks, which are likely to track a general recovery in the stock market. Hence, with stock prices at low levels in 1932, they would have offered one straightforward way for Keynes to bet on a market resurgence. Furthermore, investment trust stock prices can diverge from the underlying value of their investments, which also trade on the market. In other words, they can trade at either a premium or a discount to their net asset value (NAV). J. Bradford DeLong and Andrei Shleifer documented the existence of substantial premiums during the late 1920s, followed by substantial discounts in

<sup>22</sup> Keynes's investment in EPL 6 percent preferred and EPL 7 percent preferred from the early 1930s was also a "play" on United Gas. The two stocks were connected via a cross-holding resulting from a 1930 restructuring by which EPL acquired various securities of United Gas, including virtually the entire 2nd preferred stock issue. Keynes bought the United Gas 7 percent 1st preferred, which ranked ahead of the 2nd preferred in paying dividends. As the economic recovery continued and oil and gas prices rose from their low in 1932 to a high in 1936, the probability of United Gas clearing the dividend arrears on its 1st preferred stock and resuming payments on its 2nd preferred stock increased accordingly. Because almost all of the latter issue was held by EPL, this in turn would assist the cash flows of EPL and the payment of the dividend arrears on the 6 percent and 7 percent preferred also held by Keynes. Hence, he was attracted to all three stocks.

<sup>23</sup> We follow the sector classification in *Moody's Manuals*.

some cases in the early 1930s.<sup>24</sup> Although some trusts traded at discounts from 1932 onward, three of Keynes's investment trust core holdings—Tri-Continental Common, General American Investors Common, and Prudential Investors Common—appeared to trade at a premium to NAV at those times when Keynes was an active buyer. The NAVs attributable to a holder of common stock after deducting prior claims of these stocks had collapsed dramatically in the wake of the 1929 Crash and were zero or close to zero. As DeLong and Shleifer have argued, the existence of such premiums to NAV was due to the severe effects of the leverage of investment trusts on the collapsing value of their underlying investments.<sup>25</sup> Seen in this way, an investor in their common stock could potentially realize large gains because these shares acted as long-dated call options on the general stock market. Furthermore, it may indeed have been difficult in a very depressed market with low volumes for investors to buy stocks held within the investment trust if they had wanted to purchase these directly. Accordingly, selecting investment trusts may have been a more cost-effective way to access the underlying stocks.

Keynes also had major holdings in the industrials sector, including Homestake Mining. This gold-mining investment averaged 10 percent of the total portfolio over the eight years he held it, starting in 1933. Homestake illustrates how Keynes was willing to make large bets on special situations that were highly specific to the U.S. depression economy. The attraction of this gold-mining firm stemmed from the benefits accruing from the revaluation of gold from \$20.67 to \$35 per troy ounce by order of the U.S. government in March 1933, a move made to facilitate the recapitalization of the U.S. banking system.<sup>26</sup> Keynes's investment rationale was somewhat similar to one he employed when heavily overweighting South African gold-mining shares in the 1930s in his U.K. portfolio, on the back of the boost to revenues provided by the devaluation of the local currency.<sup>27</sup>

As we saw in the preceding text when discussing preferred stocks, Keynes's other major sector bet was public utilities. He saw that this sector offered rich opportunities for those willing to go to the trouble of undertaking fundamental security analysis. Quite apart from the opportunity provided by preferred stock dividend arrears, there existed the potential from the substantial oil and gas deposits and undiscovered

<sup>24</sup> J. Bradford DeLong and Andrei Shleifer, "The Stock Market Bubble of 1929: Evidence from Closed-End Mutual Funds," *Journal of Economic History* 51 (Sept. 1991): 675–700.

<sup>25</sup> *Ibid.*, 683.

<sup>26</sup> Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton, N.J., 1963).

<sup>27</sup> Chambers and Dimson, "Retrospectives," 213–28.

reserves held by some firms. In addition, considerable uncertainty surrounded the impact of regulatory intervention in the shape of the 1935 Public Utilities Holding Company Act (Wheeler-Rayburn Act) and, in particular, whether these companies might be broken up and reveal their intrinsic value. As mentioned previously, there were stock and bond cross-holdings among public utilities in some cases, adding to the complexity of the analysis required to understand cash flows and security valuation.

In summary, Keynes's sector tilts in his U.S. stock portfolio were considerable, and his approach appears consistent with the one he took toward his U.K. stock portfolio. In each, he largely avoided the same two sectors—banks and railroads. It is also worth considering whether Keynes's U.S. sector bets diversified his U.K. sector bets. Clearly, the absence of banks and railroads in both his U.S. and U.K. stock lists did not lead to a more diversified portfolio. Otherwise, the U.K. stock portfolio had very little if anything in investment trusts and utilities in contrast to the U.S. portfolio. Furthermore, he had only a comparatively modest investment in mining stocks despite Homestake and Climax Molybdenum being two of his core holdings. In the U.K. portfolio, however, Keynes had a very substantial weighting in South African gold mines. The only real overlap was in industrials. Here he made direct comparisons between the valuation of Austin Motors, his largest U.K. holding, and General Motors, where he had only modest positions. Using the valuation measure of market capitalization per automobile produced, Keynes believed Austin was undervalued by as much as two-thirds compared to General Motors.<sup>28</sup>

Overall, it seems reasonable to conclude that in terms of sector exposures, his U.S. stocks diversified his U.K. stocks within the overall endowment to a large degree. In the remainder of this section, we examine other pronounced characteristics of Keynes's stock picks and whether he displayed a preference for large or small firms and for value or growth firms.

The fact that the median stock he held was below the market capitalization of the average firm in the CRSP database indicates a slight tendency toward buying smaller stocks. Equally, however, he also held some large capitalization stocks at certain times, as indicated by the fact that approximately half of his stocks were larger than the market average for most of the 1930s.

<sup>28</sup> John Maynard Keynes (hereafter Keynes) to F. C. Scott, 5 Oct. 1933, folder 1, file 1, pp. 221–22 (Provincial Insurance Co., Ltd.), Papers of John Maynard Keynes, King's College Archive Centre, Cambridge (hereafter JMK Papers).

We can assess the extent to which an investor follows a “value” style—both today and in the 1930s—by comparing the book-to-market ratio of the investor’s stocks with the same ratio for the overall U.S. stock market. The book-to-market ratio for a stock is the ratio of its book value, or its asset value as reported in the balance sheet, to its common stock market capitalization. Hence, for example, a firm whose book or asset value was equivalent to its common stock market capitalization would have a book-to-market ratio of 1 times. The higher the book-to-market ratio is, the higher is the asset value of a firm compared to its common stock valuation. Correspondingly, the same ratio for the overall stock market is defined as the aggregate book value divided by the aggregate market capitalization for all listed common stocks. The book-to-market ratio across all firms with listed common stocks included in the CRSP database averaged 1.3 times over the period from 1930 to 1946.<sup>29</sup> The valuation of the stock market reached a low in 1932 with a ratio of 2.8 times and a high in 1936 with a ratio of 0.8 times. For each stock Keynes held, we computed its book-to-market ratio relative to the ratio of the overall market at calendar year end. A relative book-to-market ratio above (below) 100 percent therefore implies that a stock has a book-to-market ratio larger (smaller) than the market and would be classified as “value” (“growth”).

Figure 2 plots the relative book-to-market ratio for the twenty-fifth percentile, median, and seventy-fifth percentile of the U.S. stocks in Keynes’s portfolio. Overall, there is a pronounced tilt toward high book-to-market stocks. The only years in which the median book-to-market ratio among his stocks is below the overall market are 1932 and 1945. In the intervening years, the relative book-to-market ratio of the twenty-fifth percentile stock is close to or above the 100 percent mark, implying that the majority of his stocks can be classified as value stocks. The evidence points toward Keynes’s adopting a pronounced value approach in selecting his U.S. stocks, particularly in the mid-1930s when he appeared to seek out value stocks as the market recovery took hold.

In summary, we can see that Keynes’s U.S. stock picks displayed distinct characteristics. He concentrated on three sectors of the market, allocated to preferred stocks as much as common stocks, and exhibited a value bias. The tilt of his portfolio toward value stocks is consistent with the approach he took to investing in U.K. stocks.<sup>30</sup> In contrast,

<sup>29</sup> Data for market capitalization values are downloaded from CRSP, Stock/Security Files ©2015 and book values are taken from Kenneth French, Data Library (2014), [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html). Where data are missing we use the Moody’s manuals. We exclude investment trusts.

<sup>30</sup> Chambers and Dimson, “Retrospectives,” 213–28.

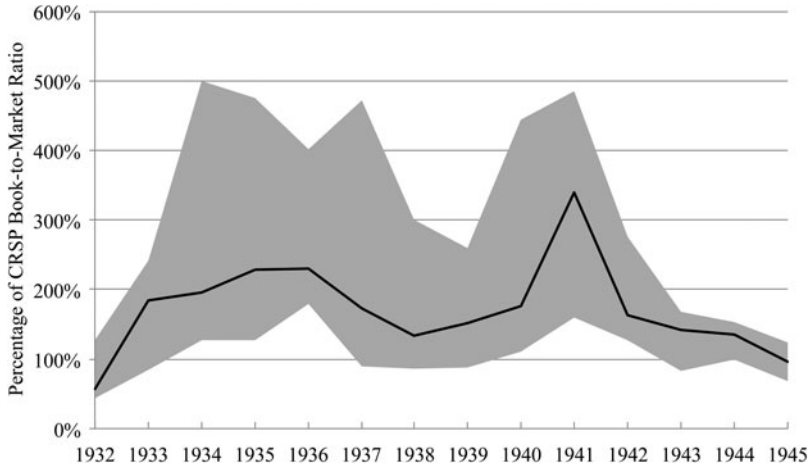


Figure 2. Relative book-to-market ratio of U.S. stocks held by King's College, 1932–1945. We plot the distribution of relative book-to-market ratios of the stocks held by King's at each calendar year end, where relative book-to-market is the ratio of each stock expressed as a percentage of the book-to-market ratio of the overall market, as described by the CRSP universe of U.S. stocks (Kenneth French, Data Library [2014]: [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)). The shaded gray area shows the distribution of the relative book-to-market ratios between the twenty-fifth percentile (bottom) and seventy-fifth percentile (top). The black line represents the median relative book-to-market ratio. Investment trust holdings are excluded. (Source: Authors' calculations.)

there is no evidence of the tilt toward smaller capitalization stocks that was present in his U.K. portfolio.

### How Did Keynes Pick His U.S. Stocks?

The considerable correspondence between Keynes and his stockbrokers and investment advisers allows us to examine how he chose his U.S. stocks. Keynes gathered information on U.S. stocks through three principle channels: he made extensive use of stockbroker research; he made field visits to the United States on two occasions, in 1931 and again in 1934; and he employed his network of personal contacts to supplement his knowledge of Wall Street.

The overall impression left by a careful reading of Keynes's correspondence with these investment advisers is that he used outside advice to supplement his own deliberations on stocks. Ultimately, he made his own investment decisions rather than following stockbroker recommendations. Keynes primarily relied on two stockbroking and investment advisory firms for sourcing research on and for trading his U.S.

investments: Case Pomeroy & Co., based in New York, and Buckmaster & Moore, based in London. To a lesser extent, he also used two other New York firms, Lazard Frères and Seligman & Co., and another London stockbroker, Lawrence, Keen & Gardner.

Keynes maintained a close relationship over many years with several partners at Buckmaster & Moore, who handled the bulk of his U.K. stock-broking needs. Most of his U.S. trades were also conducted through Buckmaster & Moore, who charged U.K. brokerage commission in addition to U.S. commission and cabling expenses.<sup>31</sup> The London stockbroker provided Keynes with longer research notes as well as two-page company reports. In some cases, Buckmaster & Moore would source research notes from other U.S. investment firms on Wall Street and pass them on to Keynes. Most often, the research reports from Buckmaster & Moore appear to have flowed in response to ideas Keynes had on a particular stock or sector—railroad stocks in June 1938, for example. Following a request from Keynes, Buckmaster & Moore sent a telegram to their U.S. research contact:

We (B&M) familiar with position Baltimore and Ohio, but have client interested depressed railroad bonds as long term speculation stop please mail your opinion relative attractions Baltimore Ohio Nickel Plate Illinois Central Southern Pacific bonds current prices stop particularly interested outlook freight, financial position, extent maintenance expenditure whether bonds held banks and savings banks and other factors you consider relevant stop indicate issues you prefer and whether junior mortgage issues better unsecured loans.<sup>32</sup>

Buckmaster & Moore then provided Keynes with a four-page letter analyzing the various bonds and recommending ten railroad bonds on the basis of their high yields and their ability to cover debt interest comfortably.<sup>33</sup> Keynes acted on this information, initiating core holdings in two stocks: Baltimore and Ohio Railroad and New York, Chicago and St. Louis Railroad Co. Other examples of research provided by Buckmaster & Moore include detailed notes on the performance of investment trusts in 1938 and on Keynes's major core holdings—EPL, United Gas, and Climax Molybdenum—in 1939.<sup>34</sup>

Keynes, not satisfied with getting his information solely through a London-based U.K. broker, also looked to investment advisory firms

<sup>31</sup> Keynes to F. C. Scott, 25 Apr. 1939, folder 3, p. 162, JMK/52/BM (Correspondence and memoranda exchanged with business houses), JMK Papers (hereafter JMK/BM).

<sup>32</sup> Buckmaster & Moore to Keynes, 21 June 1938, folder 7, p. 83, JMK/SE/2 (Correspondence and memoranda exchanged with Buckmaster & Moore), JMK Papers (hereafter JMK/SE).

<sup>33</sup> Buckmaster & Moore to Keynes, 17 June 1938, folder 7, p. 92, JMK/SE.

<sup>34</sup> Buckmaster & Moore to Keynes, 19 Dec. 1939, folder 7, p. 167, JMK/SE.



based in the United States. Preeminent among them was Case Pomeroy & Co., a small Wall Street investment banking and brokerage firm with extensive London contacts. Keynes's primary personal contact at the firm was the head of the company, Walter Case. Their relationship, which developed over a decade until Case's death in 1938, was a close and amicable one.<sup>35</sup> His firm furnished Keynes with U.S. macroeconomic and financial market views as well as specific investment recommendations.<sup>36</sup> As a general rule, Keynes solicited Case's opinions on specific stocks or sectors and Case offered stock ideas in response.<sup>37</sup> There was, in addition, an informal reciprocal agreement whereby Keynes supplied Case with information on the monetary and economic developments in Europe.<sup>38</sup> He also relied on Case when vetting other investment professionals. Approached by Warren Persons of the Goldman Sachs Trading Corporation in December 1930 about becoming a member of an information-sharing network, Keynes consulted with Case and then rejected the offer upon concluding that he did not fully trust the merits of the endeavor.<sup>39</sup>

Other than Case, Keynes corresponded with Case Pomeroy & Co.'s main analyst, David. S. Roswell. Keynes regarded Roswell as "an expert in long-range studies of the value of securities and intrinsic values of firms."<sup>40</sup> Their correspondence developed as Keynes moved toward investing in public utilities, a sector he believed required an experienced analyst capable of conducting detailed balance-sheet analysis. Keynes asked Roswell for advice on choosing between the common and preferred stock of the two public utility firms, United Gas and EPL, which, as discussed in the preceding text, would become core holdings in his portfolio.

The esteem in which he held Roswell was acknowledged in 1939 when, following the death of Case the previous year, Keynes duly signed up as a paying client of Roswell's new advisory firm, Roswell and Company. He also recommended Roswell to Prudential Insurance, a British insurance company where Keynes advised on investments, extolling Roswell's ability in long-range forecasting of stock values, especially in the public utilities sector.<sup>41</sup> An example of the extensive analysis Roswell conducted for Keynes is the case of the North American

<sup>35</sup> Case traveled to England circa 1938 to discuss investments with Keynes. Keynes to Richard Kahn, n.d., folder 57, pp. 231–36, Correspondence, GBR/0272/RFK (Papers of Richard Ferdinand Kahn), King's College Archives, Cambridge.

<sup>36</sup> Keynes to F. C. Scott, 25 Apr. 1939, p. 157, JMK/BM.

<sup>37</sup> *Ibid.*, 162.

<sup>38</sup> One such example is a letter to Case advising on U.K. exchange-rate policy in 1933, Keynes to Walter Case, Case, Pomeroy & Co., 2 Mar. 1933, folder 2, p. 311, JMK/BM.

<sup>39</sup> *Ibid.*, 87.

<sup>40</sup> Keynes to F. C. Scott, 25 Apr. 1939, p. 157, JMK/BM.

<sup>41</sup> *Ibid.*



Company. His thirteen-page analysis of this large public utility holding company in 1938 involved a full assessment of the value underlying the common stock, requiring a detailed understanding of a highly complex network of subsidiaries and cross-holdings and their breakup values.<sup>42</sup> Keynes was persuaded by Roswell's analysis, and he included this stock in the King's portfolio.

In 1931 and again in 1934, Keynes undertook month-long fact-finding visits to the United States. On his first visit, he was invited by Professor Alvin Johnson to speak at the New School for Social Research in New York. In a letter to Johnson ahead of his trip, Keynes stated that the reason for his visit was to "gather information and not impart it."<sup>43</sup> In fact, both visits proved important in helping him formulate his investment strategy and contributed to his adding to his U.S. stockholdings in the months that followed.

From archival records, we have documented the types of individuals with whom Keynes met. The [appendix](#) provides details of the people Keynes met on both trips with links to business, investment, and economic policymaking. This analysis reveals a distinct change of emphasis in the people he met across the two visits. Among the twenty-seven meetings held during his first trip, eight were with bankers, six with investment advisers, and five with central bankers. He had only three meetings with industrialists and one each with a government official and an economist. This preponderance of appointments with bankers and investment advisers in 1931 subsequently gave way to meetings with government officials and politicians in 1934. On his second trip, Keynes held thirty-eight meetings, including those with government officials, politicians, and industrialists on thirteen, eleven, and three occasions, respectively. In contrast, he met with investment advisers and bankers on only five occasions in 1934. Half of the politicians he met were members of the U.S. Banking and Currency Committee.

The contrast in schedules between Keynes's first visit and his second very likely reflected a shift in the type of investment-related information he was seeking. In 1934, and following the entry of the new Roosevelt administration into office, it is likely that his appetite for information on government policy and the nature and extent of any proposed intervention in the economy and in banking and industry was much greater than it had been three years earlier.

Keynes's first trip left him initially somewhat pessimistic about the prospects for the U.S. economy, its banking system, and the stock

<sup>42</sup> David S. Roswell to Keynes, 18 Apr. 1938, folder 3, p. 52, JMK/BM.

<sup>43</sup> Keynes to Alvin Johnson, 21 Mar. 1931, folder 1, p. 36, JMK/27/AV (American visits), JMK Papers (hereafter JMK/AV).

market. His views at the very end of this trip are neatly summarized in a letter he sent from Case Pomeroy & Co.'s offices in New York to Buckmaster & Moore on June 17, 1931 in which he stated that he saw "nothing to attract in U.S. common stocks" and foresaw no "real recovery" in the economy.<sup>44</sup> In a subsequent letter to Buckmaster & Moore on June 22, 1931, he went on to state his belief that 10 percent of the reserve system banks, as measured by assets, were insolvent. His worries included the high levels of "till money," "[banks'] . . . desire for liquidity," the pressuring of bank customers for loan repayments, and the fear of bank runs even when a bank was solvent. He placed blame for the plight of the banks on their purchases of second-grade corporate bonds, their trading at steep but uncertain discounts to face value, and their "inadequately secured" loans to farmers and to real estate firms.<sup>45</sup>

Despite his initial pessimism, Keynes's improved knowledge of the U.S. investment scene and the contacts he gained were important in giving him the necessary confidence to think about buying U.S. stocks at a later date. A key indication of this confidence is revealed in a letter dated August 1932 in which Keynes requests data and advice from Case Pomeroy & Co. on the prospects for recovery in the U.S. automobile industry.<sup>46</sup> In September 1932, Keynes sent another letter, to Walter Case, detailing his thoughts on the market having reached a low point and the improved prospects for its recovery. Therein, he reasoned that stocks and commodities had begun to recover from levels that were "too low even in relation to a slump" once they started to rise from the trough in June 1932.<sup>47</sup> He also expressed his belief that the \$1 billion program of large-scale open-market operations undertaken by the Federal Reserve in March 1932 had halted the financial crisis and that industrial output would recover in due course as a result of government spending and other interventions in the economy. His letter closed with a memorable phrase, "I should be a bull, but a scared bull—firm, but funky," in reference to his decision to start buying around the market low in the summer of 1932.<sup>48</sup>

Keynes was a net buyer of U.S. stocks in four of the five quarters following the quarter ending December 1931 (Figure 1). He diversified his earlier purchases of investment trust stocks by seeking out value opportunities in both the common and preferred stocks of industrial firms. He again increased his U.S. stock exposure after his second American visit. Anticipating a continuing recovery, Keynes immediately began investing

<sup>44</sup> Keynes to Geoffrey Marks, 17 June 1931, folder 1, p. 92, JMK/AV.

<sup>45</sup> Keynes to Geoffrey Marks, 22 June 1931, p. 95, JMK/AV.

<sup>46</sup> Case Pomeroy & Co. to Keynes, 26 Sept. 1932, folder 2, p. 246, JMK/BM.

<sup>47</sup> Keynes to Walter Case, 7 Sept. 1932, folder 2, p. 242, JMK/BM.

<sup>48</sup> The word "funky" in this context means that he was afraid and, hence, sweating.

large sums of money in such economically sensitive sectors as public utilities and, to a lesser extent, industrials—a strategy he continued through to 1937.

In addition to stock research reports and investment meetings, Keynes had an extensive network of personal contacts at his disposal. Prior research has shown that Keynes made use of his connections in the mining industry in selecting his U.K. core holdings.<sup>49</sup> How important were personal contacts in his selection of U.S. core holdings? We define a core holding as any security held for a period of at least five years with a weighting greater than 1 percent of the total value of his U.S. stocks. Per this definition, there were twenty core stocks, held for an average of more than nine years and together accounting for an average of two-thirds of his U.S. portfolio across the whole period from 1931 to 1946 (Table 2). Next, we define a connection as a director or officer of an investee company with whom Keynes had direct contact.<sup>50</sup> Having gathered the names of directors and officers from the 1930 *Moody's Manual*, we then try and match these names to those of Keynes's contacts, that is, those individuals for whom evidence exists in his correspondence of a meeting having taken place. Whether Keynes had a connection at each of his U.S. core holdings is indicated in the Contact column in Table 2.

Among his twenty core holdings, Keynes had a connection at eleven of them. Looking at his three main investment trust holdings, Walter Case (Case Pomeroy) was on the board of Selected Industries, Frederick Strauss (Seligman & Co.) was a director of Tri-Continental, and Walter Kahn and Frank Altschul (Lazard Frères) were both directors at General American Investors Company. Keynes met with all of them during his two visits. He also met Frederick Strauss, a director of EPL and of Commonwealth & Southern Corporation, in 1931. Because United Gas was part owned by EPL, the transfer of information about United Gas to directors at EPL was highly likely.

Something of a pattern exists here. In the investment trust and public-utility sectors, Keynes's connections appear to have been important, while in industrials, they do not. We can only speculate as to the reasons for this pattern. One possible explanation might lie in the relative complexity of analyzing public-utility stocks and investment trusts. The former had complicated holding structures and were subject to considerable regulatory uncertainty; the key to understanding the latter was in comprehending the underlying intrinsic asset values of their stock portfolios.

<sup>49</sup> Chambers and Dimson, "Retrospectives," 213–28.

<sup>50</sup> We also include directors of noncore holdings with whom Keynes was connected and who were themselves connected to directors or officers of Keynes's core holdings.

*Table 2*  
 U.S. Core Holdings Held by King's College, Cambridge, 1931–1946

<i>Security Name (Type)</i>	<i>Contact</i>	<i>Avg.</i>	<i>1931</i>	<i>1932</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1938</i>	<i>1939</i>	<i>1940</i>	<i>1941</i>	<i>1942</i>	<i>1943</i>	<i>1944</i>	<i>1945</i>	<i>1946</i>
<b>Investment Trusts</b>																		
Atlas Corp (cmn)	N	3					4	3	1	2	4	5						
General American Investors Co. Inc (cmn)	Y	8	28	7			2	3		4	5	5						
Prudential Investors (cmn)	N	2		4		1	1	3	3	2	2	3	1					
Selected Industries Inc (allot. Certs cmn)	Y	16	29	23	20	10	7	7										
Tri Continental Corp (cmn)	Y	8	22	5	3	1	2	4	9	7	4	3	8	7	11	12	17	21
US & Intl Securities Corp (5% 1st pref)	Y	9						2	4	4	5	5	16	18	9	12	11	14
<b>Industrials</b>																		
Associated Dry Goods (7% 2nd pref)	Y	4					4	3	3	3	2	2	7	6	4	3	4	5
Carriers & General Corp (cmn)	N	3						1	2	1	1	1	4	5	4	4	4	6
Chicago Pneumatic Tool Co (3% conv pref)	N	6							2	3	3	3	12	14	6	7	7	8
Climax Molybdenum Co (cmn)	N	3									1	1	6	8	3	2	2	2

Homestake Mining (cmn)	N	10		34	20	11	8	8	1	1	1							
Public Utilities																		
Amer. Cities Pwr & Light Corp (3% A pref)	N	3							1	1	2	2	4	2	5	4	4	5
Commonwealth & Southern Corp (6% pref)	Y	5		4	4	3	6	6	7	5	6							
Electric Pwr & Light Corp (7% pref)	Y	9					5	12	8	3	4	13	11	16	16	4		
Electric Pwr & Light Corp (6% pref)	Y	4	4	2		4	9	8	5	3	4							
United Corp (cmn)	Y	2	1				2	2	1	2	1	1	1	2	2	2	2	4
United Corp (3% pref)	Y	2		3	1	1	1	2	3	3	5							
United Gas Corp (7% pref)	Y	12			7	15	17		7	12	15							
Railroads																		
Baltimore & Ohio (5% 1st bonds)	N	6							2	2	3	10	11	6	6	6	7	
N.Y., Chicago & St. Louis (4.5% rf'g C)	N	3							1	1	1	5	6	3	3	3		
Stocks with a contact		45	79	40	32	24	38	59	46	49	43	49	46	43	42	45	38	44
Stocks without a contact		22		4	34	21	16	15	18	13	17	21	43	45	27	26	27	28

Source: Authors' calculations.

Notes: All figures represent the percentage weighting of a core holding in the U.S. portfolio valued at August year end. A core holding is defined as a security held for at least five years with a weighting in the total portfolio greater than 1 percent. There may be rounding errors in the subtotals for stocks with and without a contact. Contact refers to whether Keynes did (Y) or did not (N) meet with an officer or director of the company. "Rf'g C" is a refunding bond; "allot Certs" are allotment certificates; "cmn" is common stock; and "pref" is preferred stock.

### How Did Keynes's U.S. Stocks Do?

For each of the U.S. investments held by Keynes at the start of each calendar year, we estimate the buy-and-hold total return where total return comprises both capital appreciation (depreciation) and the dividend yield, over the following year. We then compute the total return on his U.S. portfolio in a given year by averaging the buy-and-hold return on each security according to its weighting by the market value at the start of the year as a proportion of his total U.S. portfolio. While this method ignores the precise dates on which he bought and sold a stock within a given calendar year, it provides a reasonable approximation of his overall portfolio performance.

Keynes's buy-and-hold returns for each year ending December 31 over the period of 1930 to 1945 are summarized in [Table 3](#). The total return, including dividends on the U.S. stock market, is measured by the Cowles Index. Across the whole period, the average annual buy-and-hold return on his U.S. investments was 13.6 percent, comfortably exceeding the average market return of 8.4 percent per annum. His U.S. investments did better than the overall markets in eight out of the sixteen years he ran the portfolio. Other than 1930–1931 and 1941–1942, when he had relatively little money at stake, his main period of underperformance was in 1936–1938, when Wall Street entered a second bear market.

The analysis in [Table 3](#) allows us to examine the performance of Keynes's common versus preferred stocks and his core versus noncore holdings. The average annual return on his common stocks (21 percent) slightly exceeded that on his preferred stocks (17.8 percent). Second, his core holdings (18.4 percent) performed considerably better than his noncore holdings (7.3 percent). Here is further evidence of his stock-picking skills, in that those stocks in which Keynes invested the most were his best performers.

Giving some consideration to risk, it is true that Keynes constructed a U.S. stock portfolio that was more risky than the market. We noted previously that he excluded certain sectors from his portfolio and adopted a pronounced tilt toward value stocks. Hence, it is no surprise to find that the volatility of his annual total returns was 37.2 percent compared to 28.2 percent for the market. However, King's College and Keynes were both well rewarded for taking this level of risk. The reward-to-risk ratio—known as the Sharpe ratio—is measured by the excess return over the risk-free rate divided by the standard deviation of returns. Ratios of 0.36 on Keynes's U.S. stock portfolio and 0.47 for his common stocks alone comfortably exceeded the 0.29 ratio for the market.

*Table 3*  
Performance of U.S. Security Holdings Held by King's College, Cambridge, 1930–1945

	<i>Total</i>	<i>U.S. Market</i>	<i>Excess</i>	<i>Common</i>	<i>Preferred</i>	<i>Bonds</i>	<i>Core</i>	<i>Noncore</i>
1930	-37.1	-23.2	-13.9	-36.2				
1931	-51.0	-39.3	-11.7	-51.0			-50.0	-52.1
1932	28.7	-8.6	37.3	43.7		-46.5	44.6	-3.9
1933	70.4	55.7	14.8	102.1	3.2	-14.8	8.7	105.0
1934	26.2	-2.4	28.6	23.7	26.9	114.2	28.6	23.9
1935	56.3	45.6	10.7	57.4	61.1	2.8	74.3	45.0
1936	32.9	34.3	-1.4	18.8	40.6	32.8	46.9	13.9
1937	-40.9	-32.0	-8.9	-40.2	-42.5	-13.6	-38.4	-47.0
1938	17.1	22.3	-5.2	22.2	12.7	3.2	13.7	20.7
1939	5.7	3.0	2.7	-6.7	14.7	7.0	7.6	2.7
1940	-0.9	-10.4	9.5	-9.8	5.9	5.8	0.5	-3.5
1941	-24.1	-10.6	-13.4	-11.0	-36.1	14.8	-15.7	-43.4
1942	3.1	16.6	-13.5	54.7	-2.9	-31.1	7.6	-32.9
1943	65.3	27.4	37.9	51.9	85.4	36.8	68.4	46.5
1944	31.1	19.3	11.8	34.6	42.4	15.9	37.0	17.7
1945	35.0	37.1	-2.1	81.1	37.7	-0.4	42.3	16.3
Mean	13.6	8.4	5.2	21.0	17.8	9.1	18.4	7.3
S.D.	37.2	28.2	17.5	44.2	34.8	37.7	35.7	41.5
S.R.	0.36	0.29	-	0.47	0.50	0.23	0.51	0.17

Source: Authors' calculations.

Notes: All figures are value-weighted buy-and-hold total returns including dividends for each calendar year ending December. U.S. market refers to the total return on common stocks represented by the Cowles Index. Excess is the difference between the total portfolio and the U.S. market returns. Core refers to core holdings defined as securities held for at least five years with a weighting in the total portfolio greater than 1 percent. S.D. is standard deviation. S.R. is the Sharpe ratio, defined as the excess return on the total portfolio over the risk-free rate divided by the standard deviation of returns.

A final question arises: How did Keynes's U.S. investment record compare to other contemporary investors in the U.S. stock market? A partial picture of Graham's performance has been uncovered. This fragmentary evidence suggests that Graham outperformed the market from 1925 to 1935, recording a return of 6 percent per annum versus 3.8 percent for the Dow Jones Industrials Index.<sup>51</sup> No data exist for the remaining years that overlapped with Keynes's management of the King's portfolio. Quite possibly, there may have been any number of investment opportunities after the 1929 Crash for those investors with a strong nerve prepared to undertake detailed security analysis. However, at this point we do not know and the authors are not aware of any other study of the performance of U.S. investment funds in this same time period.

### Conclusion

Keynes was but one investor among many trying to make sense of the turbulent market conditions on Wall Street in the late 1920s and 1930s. This study of Keynes's U.S. investment experience is only possible because of the detailed and extensive archival evidence that he left behind. As a result, we can trace his every investment move. The picture that emerges from our analysis of Keynes's investments in U.S. stocks on behalf of his Cambridge college provides a much-needed glimpse into how portfolio investment was practiced in the wake of the greatest U.S. stock market crash of the twentieth century. More research by business historians is needed to discover what other investors were doing in the same period.

Despite the appeal of common stocks, Keynes allocated almost as much money to preferred stocks. On the whole, these stocks did about as well as his common stocks and considerably better than the overall common stock index. Today, preferred stocks have disappeared from institutional portfolios, which are dominated instead by common stocks and bonds. Prior to the post-World War II changes in taxation, which disadvantaged preferred stocks, they played an important role in investor portfolios and in corporate finance. The 1920s and 1930s therefore represent a period of transition on the road to the "cult of the equity" that prevailed toward the end of the twentieth century.

Keynes concentrated his portfolio on three sectors—investment trusts, public utilities, and industrials—while virtually ignoring others,

<sup>51</sup> Irving Kahn and Robert D. Milne, "Ben Graham: The Father of Financial Analysis" (occasional paper no. 5, Financial Analysts Research Foundation, Charlottesville, Va., 1977), 42–46.



including banking. Moreover, he displayed a liking for value stocks. Both Keynes and Graham alighted on the same recipe for long-term investment success, despite never having discussed the topic (to the best of our knowledge). Keynes's tilt toward value stocks and pronounced sector bets in his U.S. portfolio are consistent with how he invested in U.K. stocks as well.

In analyzing how Keynes went about picking stocks, we can see some elements of the investment approach favored by professional portfolio managers today. Keynes was an enthusiastic consumer of well-executed stockbroker research, seeking out the best industry analysts he could find—Roswell at Case Pomeroy & Co. being a prime example. He was generally not interested in stockbroker recommendations on individual stocks; rather, he used their research capability to analyze the stocks and industries in which he was interested. Furthermore, he visited policymakers and the management of some of his largest investments, making key contacts that enabled him subsequently to monitor his investments. Such meetings with policymakers and management are an important tool of modern-day portfolio managers.

Last but not least, Keynes wrote authoritatively about the psychology of investors and the stock market in *The General Theory*. The intriguing question here concerns the process by which he came to acquire these insights. It would seem reasonable to conclude that they arose at least in part from his own investment experiences. In the 1930s, Keynes had become the “long-term investor” carefully sifting through the fundamentals and attempting to withstand the irrational behavior of the herd. Our aim in this study, together with companion studies on his U.K. trading, is to make the important connection between Keynes's work as an economist and his experiences as an investor.<sup>52</sup>

. . .

DR. DAVID CHAMBERS is reader in finance, a Keynes Fellow, and academic director of the Newton Centre for Endowment Asset Management at Judge Business School, Cambridge University. His research interests span financial history and asset management. He was the Thomas McCraw Fellow at Harvard Business School in 2012. His previous research on John Maynard Keynes has been published in the *Journal of Economic Perspectives*, *Journal of Financial and Quantitative Analysis*, *Journal of Economic History*, *Financial Analysts Journal*, and a National Bureau of Economic Research book, *How the Financial Crisis and the Great Recession Affected Higher Education* (2015).

<sup>52</sup> Chambers and Dimson, “Retrospectives,” 213–28; Chambers, Dimson, and Foo, “Keynes the Stock Market Investor,” 843–68.

DR. ALI KABIRI is senior lecturer in economics at the University of Buckingham, research associate in the Financial Markets Group at the London School of Economics, and honorary lecturer in the Faculty of Brain Science at University College London. His research interests span financial history, banking crises, and behavioral finance. He is the author of *The Great Crash of 1929: A Reconciliation of Theory and Evidence* (2015).

## Appendix

### Keynes's Meetings on Trips to the United States in 1931 and 1934

---

#### Panel A: 1931 meetings

---

<i>Name</i>	<i>Affiliation</i>
<b>Bankers</b>	
Benjamin Anderson	Chase National Bank
George Davidson	President, Central Hanover Bank & Trust Co.
Russell Leffingwell	J.P. Morgan
Walter Lichtenstein	First National Bank of Chicago
George M. Reynolds	Continental Illinois Bank & Trust Co.
Jackson Reynolds	President, First National Bank
Harold Stanley	J.P. Morgan
Melvin Traylor	First National Bank of Chicago
<b>Investment advisors</b>	
Henry Breck	Seligman and Co.
Albert Forsch	Lazard Frères
Walter Kahn	Economist, Lazard Frères
Lester Perrin	Lazard Frères
Alexander Sachs	Lehman Corp.
Frederick Strauss	Seligman and Co.
<b>Central bankers</b>	
W. R. Burgess	Deputy governor, Federal Reserve Bank of N.Y.
Leon Fraser	Director, Bank for International Settlements
Dr. E. A. Goldenweiser	Board of Governors of the Federal Reserve
Governor J. B. McDougal	Federal Reserve Bank of Chicago
Dr. Adolf Miller	Board of Governors of the Federal Reserve
<b>Industrialists</b>	
Dr. H. D. Daikin	Chemist and inventor
Orlando Weber	President, Allied Chemical Corp.
Owen D. Young	Rockefeller Foundation / Radio Corp. America

---

Continued.

Appendix: Panel A  
Continued

<i>Name</i>	<i>Affiliation</i>
Government officials	
T. F. Woodlock	Former Interstate Commerce Commissioner
Economists	
L. Kuvin	National Industrial Conference Board
Life insurers	
David F. Houston	President, Mutual Life Insurance Co.
Others	
Paul Cravath	Lawyer
Charles P. Howland	Council on Foreign Relations and <i>Foreign Affairs</i> magazine

Panel B: 1934 meetings

<i>Name</i>	<i>Affiliation</i>
Politicians	
Sen. Alva B. Adams	(D-CO) member, banking & currency, mines & mining cttees
Sen. Warren R. Austin	(R-VT) member, judiciary, military affairs cttees
Sen. Robert J. Bulkley	(D-OH) member, banking & currency cttee
Sen. Marcus Coolidge	(D-MA) chairman, immigration cttee
Sen. Edward Costigan	(D-CO)
Sen. Duncan Fletcher	(D-FL) chairman, banking & currency cttee
Sen. Hamilton F. Kean	(R-VT) member, judiciary, military affairs cttees
Sen. Charles McNary	(R-OR) member, commerce, agri. & forestry, manufac. cttees
Pres. F. D. Roosevelt	President, United States of America
Sen. John G. Townsend	(R-DE) member, banking & currency, appropriations cttees
Sen. Frederic Walcott	(R-CT) member, banking & currency, labor cttees
Government officials	
Louis Brandeis	U.S. Supreme Court
Thomas G. Cocoran	Reconstruction Finance Corp. (RFC)
Joseph B. Eastman	Interstate Commerce Commission
Herbert Feis	Economist, Dept. of State
Paul T. Homan	National Recovery Administration (NRA)
Ogden L. Mills	Former Secretary of the Treasury
Henry Morgenthau Jr.	Secretary of the Treasury
William Phillips	Undersecretary of State
Frances Perkins	Secretary of Labor
Donald R. Richberg	Director, NRA
Francis Sayre	Assistant Secretary of State
George Terborgh	NRA
Rexford Tugwell	Dept. of Agriculture

Continued.

Appendix: Panel B  
Continued

---

<i>Name</i>	<i>Affiliation</i>
Industrialists	
Walter Chrysler	Chrysler Corp.
Whitney Shephardson	Council on Foreign Relations / United Fruit Co.
Alfred Sloan	General Motors
Investment advisors	
Frank Altschul	Lazard Frères
Earle Bailie	Seligman and Co.
Henry Breck	Seligman and Co.
Walter Case	Case Pomeroy and Co.
Academics	
W. B. Donham	Director, Harvard Graduate School of Business
Economists	
Dr. Wesley C. Mitchell	Director, National Bureau of Economic Research
Bankers / Central bankers	
W. R. Burgess	Deputy governor, Federal Reserve Bank of N.Y.
Russell Leffingwell	J.P. Morgan
W. W. Riefler	Asst. to chairman, Board of Governors of the Federal Reserve
Others	
Allen Dulles	Secretary, Council on Foreign Relations
John Foster Dulles	Lawyer

---

Panel A sources: John M. Keynes to Alvin Johnson, 21 Mar. 1931, folder 1, p. 54, JMK/27/AV (American visits), Papers of John M. Keynes, King's College Archive Centre, Cambridge (hereafter JMK/AV); Frederick Strauss to John M. Keynes, 30 June 1931, folder 1, p. 156, JMK/AV; Aubrey Romine to John M. Keynes, 31 May 1931, folder 2, p. 96, JMK/AV; Lazard Frères to John M. Keynes, 10 June 1931, folder 1, p. 63, JMK/AV. Panel B sources: Unknown to John M. Keynes, c. 21 May 1934, folder 3, p. 93, JMK/AV; Herbert Feis to John M. Keynes, c. 18 May 1934, folder 2, p. 52, JMK/AV; Henry Breck to John M. Keynes, 1 June 1934, folder 2, p. 145, JMK/AV; John M. Keynes to Richard F. Kahn, 23 May 1934, folder 2, p. 75, JMK/AV; Frances Perkins to John M. Keynes, 23 May 1934, folder 2, p. 66, JMK/AV; John M. Keynes, note to self, c. May 1934, folder 3, p. 84, JMK/AV.