
INTRODUCTION

In early 1927, Friedrich A. Hayek, a young Austrian economist who had not yet even begun his university teaching, sent a request to the most famous living British economist. John Maynard Keynes answered the query with a postcard dated February 24. It contained the single sentence, "I am sorry to say that my stock of *Mathematical Psychics* is exhausted".¹

In early 1946, Hayek saw Keynes for the last time; their conversation would haunt him for years. Hayek asked Keynes whether he was concerned about what certain of his followers were making of his theories. The ever-confident Keynes replied that one must not worry about such things, that should those who called themselves 'Keynesians' ever become dangerous, he could turn public opinion against them in an instant. In the closing sentences of his review of Roy Harrod's *The Life of Keynes*, Hayek remembered the moment: "[H]e indicated by a quick movement of his hand how rapidly that would be done. But three months later, he was dead".²

In the nineteen years between the postcard and the conversation, twentieth-century economics was transformed, and the battle between Hayek and Keynes was central to the transformation. Sir John Hicks put it this way:

When the definitive history of economic analysis during the 1930s comes to be written, a leading character in the drama (it was quite a drama) will be Professor Hayek. Hayek's economic writings—I am not concerned here with his later work in political theory and in sociology—are almost unknown to the modern student; it is hardly remembered that there was a time when the new theories of Hayek were the

¹Postcard, Keynes to Hayek, February 24, 1927. In the Hayek collection, The Hoover Institution Archives, Stanford, Calif.

²F. A. Hayek, "Review of R. F. Harrod's *The Life of John Maynard Keynes*", *The Journal of Modern History*, vol. 24, June 1952, pp. 195-198, reprinted as chapter 10, this volume.

principal rival of the new theories of Keynes. Which was right, Keynes or Hayek?³

Our goal in this volume is to recount the story, one that can be seen as part cautionary tale, part morality play, and (as it remains even now) part riddle. Though they first met in the late 1920s, the active exchange between Hayek and Keynes actually began in 1931. We will begin by tracing the sequence of events that brought each to his position in the ensuing debate.

Keynes

John Maynard Keynes was born in Cambridge on June 5, 1883, the first child of John Neville and Florence Keynes. Neville Keynes taught logic, but had been an early student of Alfred Marshall's and would become famous for publishing in 1891 an influential book on the methodology of economics. Maynard studied mathematics as an undergraduate. In 1905, he briefly took up economics to prepare for the Civil Service Examination. From 1906 to 1908 he worked in the India Office, then accepted a lectureship financed by A. C. Pigou in economics at Cambridge. Keynes was elected a Fellow of King's College in 1909 to continue his work on probability theory. He also continued to teach economics, and made his mark relatively quickly within the small circle of Cambridge economists. He took over editorship of the *Economic Journal* from F. Y. Edgeworth in 1911 at the age of twenty-eight and became secretary of the Royal Economic Society two years later. During the war he held a post in the British Treasury. His work there earned him a seat at the Paris Peace Conference as the chief Treasury representative. He was to resign in protest over the severity of the 'Carthaginian Peace' that, despite his best efforts, he saw emerging from the talks. Prior to his resignation, Keynes's successful efforts to ensure the avoidance of mass starvation in Austria had made him a hero among Central Europeans. But in the late summer, after leaving Paris, he penned the book that would bring him truly international fame, *The Economic Consequences of the Peace*.⁴ Keynes became a hero to idealists and

³John Hicks, "The Hayek Story", in *Critical Essays in Monetary Theory* (Oxford: Clarendon Press, 1967), p. 203.

⁴J. M. Keynes, *The Economic Consequences of the Peace* [1919], reprinted as vol. 2 (1971) of *The Collected Writings of John Maynard Keynes*, Austin Robinson and Donald Moggridge, eds, 30 vols (London: Macmillan (for the Royal Economic Society), 1971-89). All further references to Keynes's writings will be to the relevant volume in *The Collected Writings of John*

internationalists around the world. His main thesis was not that the terms of the treaty were unjust, though he thought that they were. It was rather that the huge amounts of reparations demanded, intended to punish Germany and prevent her from ever becoming a power again, could potentially lead to the collapse of civilization in Europe. His prescience about the consequences of the peace increased Keynes's reputation as time passed.

Keynes and the Gold Standard

A central theme of *Economic Consequences* was that the war had transformed Europe, that relations among states were categorically different from those that had existed before, and that the new age demanded new policies. Keynes gave concrete form to his vision when he joined the debate over the return to the gold standard a few years later.

For two generations preceding the war, England had been the world center for trade and finance. The gold standard was widely credited at the time with keeping international financial markets orderly and thereby ensuring the steady growth of commerce and capital investment. It was thought to work this way: Whenever the British bought more goods from foreigners than they sold to them, gold would flow out to make up the difference. The gold outflow would, through various channels, cause the Bank of England to raise Bank Rate (the interest rate under its control) in response. As other interest rates were pushed upwards, economic activity would slow. The slowdown would bring about a general deflation, a forcing down of domestic prices and wages, which was usually accompanied by increased unemployment as well. The lowering of wages and prices was painful but restorative medicine. Lower British prices would reduce domestic demand for relatively higher-priced imports while stimulating foreign and domestic demand for British goods. This would lead to a restoration of balance of payments equilibrium.

Recent scholarship asserts that many of the beliefs prevalent in the interwar period about the workings of the gold standard were myths. The relative success of the standard in the late nineteenth century is now attributed less to the vigilance and power of the Bank of England, and more to the cooperation of a number of central banks and to the credibility of their joint responses to crises. World War I ended both the ability and willingness of the banks to act in concert. Indeed, the attempt to reestablish and maintain the standard in the new environ-

Maynard Keynes.

ment was one reason that the 'Slump of 1930' turned into a worldwide Great Depression.⁵ The central point for our purposes, however, is that at the end of the First World War many in government thought that a return to gold was a necessary condition for the reestablishment of stability in international commerce and finance.

In Britain, an embargo on gold exports imposed during the war became embodied in an Act in 1920, but was set to expire in 1925. If no further action were taken, on expiration the pound sterling would again be exchangeable against the dollar at the prewar exchange rate of £1 = \$4.86. Though the pound was worth considerably less than \$4.86 following the war, the embargo provided some breathing room during which, it was hoped, its value might rise towards prewar parity. A recession in Britain in 1920–21 helped move sterling in the right direction against the dollar. But the unemployment rate also soared, reaching a high of 22.4 per cent in July, 1920, and remaining in the 10 per cent range for the next three years.

It was in his 1923 book, *A Tract on Monetary Reform*, that Keynes began to speak out against the "barbarous relic" of the gold standard.⁶ He began the book by detailing the adverse effects of an "unstable value of money" on both distribution and production. He analyzed both inflation and deflation, and summarized their effects as follows: "Thus inflation is unjust and deflation is expedient. Of the two perhaps deflation is, if we rule out exaggerated inflations such as that of Germany, the worse; because it is worse, in an impoverished world, to provoke unemployment than to disappoint the rentier".⁷

If England were to decide to return to the gold standard, Keynes (at least in 1923) was willing to take a wait-and-see attitude about whether it should be at the prewar rate or at a lower one. More controversially for the times, Keynes argued that a return to gold at a fixed convertibility rate, no matter what the value, would be a mistake. It was here that his vision of a changed world came into play. The gold standard may have provided stability for international markets when England dominated world trade. But its time had passed. European markets were in shambles; socialist, reactionary, and nationalist movements competed for influence in both long-established and newly formed nations; most

⁵See Barry Eichengreen, *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939* (New York and Oxford: Oxford University Press, 1992).

⁶J. M. Keynes, *A Tract on Monetary Reform* [1923], reprinted as vol. 4 (1971) of *The Collected Writings of John Maynard Keynes*, op. cit., p. 138.

⁷*Ibid.*, p. 36. Rentiers are owners of financial capital and other property. In Germany, hyperinflation had wiped out the savings of the middle- and upper-class rentiers who had bought bonds to support the war effort.

importantly, the United States had replaced Britain as the world centre of commerce and finance. A return to gold would require that the US Federal Reserve system, only a decade old and buffeted by domestic political influences, should avoid errors and coordinate its actions with the Bank of England. Keynes doubted that such coordination could be achieved on a sustained basis. His policy recommendation was that the monetary authorities of Britain and the United States should make the internal stability of the value of money their first priority. Rather than fixing the exchange rate, he recommended that a form of the "crawling peg" system be instituted in which the exchange rate would move to preserve internal price stability. If the central banks of the United States and Britain were able to coordinate their actions, exchange rate stability would also result. But internal stability should be the first priority of policy.

Again his advice went unheeded. On March 17, 1925, Chancellor of the Exchequer Winston Churchill held an unusual dinner party. Two months earlier, he had distributed a memorandum that made the case against a return to gold, to which he invited a response. (Given its similarity to a school examination, the memo became known as "Mr. Churchill's Exercise".) Over dinner, Keynes and former Chancellor Reginald McKenna debated the merits of the case with two top Treasury officials. Churchill listened, occasionally offering comments of his own. In the end, the Chancellor decided to return to the gold standard at a fixed prewar parity of £1 = \$4.86.⁸

The Evolution of Keynes's Policy Views

Harry Johnson called the return to gold at \$4.86 "an act of blind traditionalism", and Churchill's error was indeed a consequential one.⁹ Increased foreign competition had begun to undermine England's industrial, manufacturing, and commercial sectors even before the war. The disruption of trade during the war years exacerbated longstanding problems. In the best of circumstances, the 1920s would have been a painful period of structural realignment for England. The upwards

⁸For accounts of the fateful dinner party, see D. E. Moggridge, *British Monetary Policy 1924–31: The Norman Conquest of \$4.86* (Cambridge: Cambridge University Press, 1972); and P. J. Grigg, *Prejudice and Judgment* (London: Cape, 1948). The latter was written by Churchill's private secretary for matters of Finance and Administration, who had attended the dinner.

⁹Harry Johnson, "The Shadow of Keynes", in *The Shadow of Keynes: Understanding Keynes, Cambridge and Keynesian Economics*, Elizabeth Johnson and Harry Johnson, eds (Chicago: University of Chicago Press, 1978), p. 176.

movement of the value of sterling towards prewar parity prior to 1925, and efforts to sustain that exchange rate afterwards, kept interest rates high, battered export industries, and held the unemployment rate in the 10 per cent range for the rest of the decade.

Even more crucial for our story is Keynes's response to the stagnant economic conditions of the 1920s. Though he did not deny the effects of both structural changes and policy missteps, Keynes ultimately concluded that a more fundamental change had occurred, that the whole system of laissez faire capitalism required re-examination.¹⁰

In Keynes's colorful prose, the unemployment rate had become "stuck in a rut"¹¹ at an unusually high level: something had caused the equilibration mechanism to stall. As noted above, one of the consequences of the return to gold was high interest rates. Such rates attracted savings. Unfortunately, the level of savings became too high; there were insufficient profitable domestic investment opportunities available. As a result, British funds were drawn to finance investments overseas. Looked at another way, British industry was no longer competitive.

Normally such a situation should not persist. High unemployment should cause British prices and costs to drop, and this should eventually restore a competitive edge. But it was here that an additional problem surfaced. Due to the growing political strength of Labour, it was more difficult to force wages, and hence costs, downwards.¹² Nor was a cut in real wages via inflationary monetary policy an option, since inflation would only serve to exacerbate the exchange rate problem.

It was in considering this dismal situation that Keynes hit upon another solution, one that went beyond the nostrums of laissez faire, one that he himself thought constituted a "drastic" remedy.¹³ The state should coordinate savings and investment, undertaking an extensive program of public works (such as the construction of roads, housing, and electrical plants) that would create jobs to make use of the unemployed labour. This would reverse the flow of savings out of the

¹⁰That Keynes's goal in the interwar period was "to save a capitalist system he did not admire" (p. xv) is a dominant theme in Robert Skidelsky, *John Maynard Keynes: Volume Two, The Economist as Saviour 1920-1937* (London: Macmillan, 1992).

¹¹J. M. Keynes, "Does Unemployment Need a Drastic Remedy?" [1924], reprinted in *Activities 1922-1929: The Return to Gold and Industrial Policy*, ed. Donald Moggridge, vol. 19, part 1 (1981), of *The Collected Writings of John Maynard Keynes*, op. cit., p. 220.

¹²Though it was to last only ten months, the first Labour government was formed in 1923 with Ramsay MacDonald at its head. Keynes's prognostications received further confirmation when a bitter dispute between workers and owners in the coal industry led to a General Strike in 1926.

¹³J. M. Keynes, "Does Unemployment Need a Drastic Remedy?", op. cit., pp. 219-223.

country, would add to the domestic capital stock, and best of all, once such projects were under way, it would be discovered that "*prosperity is cumulative*".¹⁴ The happy effects on labour are described by Keynes as follows:

[W]e must seek to submerge the rocks in a rising sea,—not forcing labour out of what is depressed, but attracting it into what is prosperous; not crushing the blind strength of organized labour, but relieving its fears; not abating wages where they are high, but raising them where they are low.¹⁵

Over the next few years, Keynes developed and promoted these ideas, both in his popular writings and in a series of Liberal Summer Schools, open to the public, held in alternate years in Oxford and Cambridge. In 1928, his ideas formed the basis for a number of themes in the Liberal Party publication *Britain's Industrial Future*, dubbed the 'Yellow Book'. Lloyd George, the Liberal Party leader, embraced the proposals in his manifesto, *We Can Conquer Unemployment*, published prior to the 1929 General Election.

The most outspoken opponent of Keynes's new views was neither another political party nor a body of academic economists, but the Treasury. In his budget speech in April, Churchill stated a position that soon became known as the 'Treasury View': "It is the orthodox Treasury dogma, steadfastly held, that whatever might be the political and social advantages, very little additional employment and no permanent additional employment can in fact, and as a general rule, be created by State borrowing and State expenditure."¹⁶ This was followed by an official Treasury White Paper defending from Liberal criticisms various actions that the Treasury had taken. The Liberals placed third in the election. Ironically, neither Labour (which won) nor the Conservatives had any truck with the new ideas. Keynes's impression of the matter is recalled by Elizabeth Johnson:

¹⁴*Ibid.*, italics in original, p. 221. Note the suggestion of the notion of the multiplier in this phrase. Keynes's biographer Roy Harrod observed that this article contains "the outline of the public policy which has since been specifically associated with his name". See his book *The Life of John Maynard Keynes* (New York: Harcourt Brace, 1951; New York: Norton, 1982), p. 350.

¹⁵*Ibid.*, p. 220.

¹⁶The evolution of the Treasury View from a theoretical to a pragmatic argument against public works as a policy to fight unemployment is carefully documented in Peter Clarke, *The Keynesian Revolution in the Making, 1924-1936* (Oxford: Clarendon Press [1988], 1990), chapters 3 and 7. Churchill's quote may be found on p. 67.

Both Conservative and Labour governments—in the “fatalistic belief that there can never be any more employment than there is”, as Keynes had expressed it in 1929—sat tight during the 1920s and 1930s, instructed by the civil servants of the Treasury school whom he later characterized as “trained by tradition and experience and native skill to every form of intelligent obstruction”.¹⁷

As usual, Keynes did not give up. Debate over the issue would continue in deliberations of the Macmillan Committee on Finance and Industry, a group set up to investigate the effects of the financial and monetary systems on the state of industry, which met from November 1929 through May 1931. Keynes both offered his own evidence and, as a member of the committee, played the role of interrogator when Treasury and Bank of England officials appeared.

The evolution of Keynes's thought on policy during the 1920s has necessarily been simplified in this account, but in broad outline it was as follows: The return to gold at a fixed and overvalued rate kept interest rates high, and it also effectively eliminated monetary policy as a stabilization tool. The emerging strength of the Labour party meant that cuts in nominal wages could be resisted. As such, the deflation necessary to bring the system back into equilibrium would take a very long time to work and would be accompanied by unacceptably high levels of unemployment. Increased spending on public works held out the promise of at least putting some people back to work. If prosperity indeed turned out to be “cumulative”, it might be able to do much more. All of this was contained in Keynes's popular writings and governmental papers; it had yet to work its way convincingly into his theoretical tracts in economics.

A final episode provides additional insights into Keynes's views on policy, and into his personality as well. When Keynes was writing in the 1920s, the unemployment rate in Britain was 10 per cent. By 1931, it was in the 20 per cent range. As early as the summer before, Keynes began reluctantly to advocate that protectionist measures be undertaken to help fight unemployment and stem the flight of gold. He did this privately, in deliberations of government committees and in letters to government officials. But finally on March 7, 1931, he publicly endorsed a revenue tariff in an article printed in the weekly *The New Statesman and Nation*. This was followed by a more popular version the following week in *The Daily Mail*.¹⁸

¹⁷Johnson and Johnson, op. cit., p. 19.

¹⁸See his “Proposals for a Revenue Tariff”, reprinted in *Essays in Persuasion*, vol. 9 (1972) of *The Collected Writings of John Maynard Keynes*, op. cit., pp. 231–238; also see the

Prior to the 1930–31 period, Keynes had been an advocate (and sometimes an outspoken one) of free trade. Indeed, earlier in the 1920s, he had lambasted a proposal put forward by Conservatives to use protectionism to reduce unemployment. His reversal brought an outcry from Lionel Robbins and a number of others in the academic community.¹⁹ Exchanges in the form of letters to the editor appeared in papers and weeklies in March and April. As summer approached, the economic situation deteriorated. Problems faced by an Austrian bank (the *Credit-Anstalt*) in May led to a gold drain from English banks by July. In August, the Labour government led by Ramsay MacDonald collapsed, and a “National Government” coalition with MacDonald at its head took over. The gold standard was finally abandoned on September 21, 1931. Since his dalliance with protectionism was tied to preserving the standard, once it had been given up, Keynes withdrew his support for the tariff.²⁰ The political damage had already been done, however. The first move of the National Government was to institute a general protective tariff.

The situation facing England in the summer of 1931 was a complicated one, and Keynes, like others, was desperately seeking a solution for it. While calls for protection from foreign competition can always be heard, they become particularly vociferous, as well as politically attractive, in times of high unemployment. At such times, economists are often the only group consistently willing to articulate the case for free trade, and, if their arguments are persuasive, this may keep politicians from giving in to protectionist pressures. When the most famous and articulate British economist supports first one policy, then another, the making of economic policy very quickly becomes subservient to political concerns, and principle yields to expediency. At least this was the way that Keynes's opponents saw it, and in this case it seems that they were right.

materials in *Activities 1929–1931: Rethinking Employment and Unemployment Policies*, ed. Donald Moggridge, vol. 20 (1981) of *The Collected Writings of John Maynard Keynes*, op. cit., pp. 488–515.

¹⁹Robbins wondered how the internationalist who had written *Economic Consequences of the Peace* could succumb to “the petty devices of economic nationalism”. Quoted in Donald Winch, *Economics and Policy: A Historical Study* (New York: Walker, 1969), p. 150.

²⁰It was doubtless his flip-flop on the tariff that led to the following version of the old joke about the propensity of economists to disagree: “Where five economists are gathered together there will be six conflicting opinions, and two of them will be held by Keynes.” See Thomas Jones, *A Diary with Letters, 1931–50* (London: Oxford University Press, 1954), p. 19.

Hayek

Friedrich A. Hayek was born in Vienna on May 8, 1899, making him Keynes's junior by sixteen years. After serving in an artillery battery in the First World War, Hayek entered the University of Vienna, where he took courses in a variety of fields, including psychology, law, and economics. His first degree (in law) was awarded in November 1921. While working towards a second degree under Friedrich von Wieser (one of the 'second-generation' Austrian economists), Hayek took a job at a temporary government agency that had been set up to resolve private international debts incurred prior to the war. Ludwig von Mises was a director at the agency and soon became Hayek's mentor. Mises was a staunch anti-inflationist, and had made a name before the war as a monetary theorist with his book *Theorie des Geldes und der Umlaufsmittel*.²¹ In the year following Hayek's appointment, Mises finished his next major work, *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus*.²² According to Hayek, this book "gradually but fundamentally altered the outlook of many of the young idealists returning to their university studies after World War I".²³ This group included, of course, Hayek himself.

Hayek's Trip to America

In the spring of 1922, the American economist Jeremiah Jenks passed through Vienna. He was planning to write a book on Central Europe and promised Hayek a job as a research assistant if he came to the United States the following year. In March 1923, immediately upon finishing his second degree, Hayek left for a fourteen-month stay in the United States. He worked briefly for Jenks, then enrolled on scholarship as a student at New York University. While there, he worked collecting business cycle data for Professor Willard Thorp. He did his research at the New York Public Library, often sharing a table with B. H. Beckhart, who was writing a book on the Federal Reserve System. In his spare time, Hayek 'gate-crashed' courses at Columbia, including Wesley Clair

²¹Ludwig von Mises, *Theorie des Geldes und der Umlaufsmittel* (Munich and Leipzig: Duncker & Humblot, 1912), 2nd edition translated by H. E. Batson as *The Theory of Money and Credit* (London: Cape, 1934; reprinted, Indianapolis, Ind.: LibertyClassics, 1981).

²²Ludwig von Mises, *Die Gemeinwirtschaft: Untersuchungen über den Sozialismus* (Jena: Gustav Fischer, 1922), 2nd edition translated by J. Kahane as *Socialism: An Economic and Sociological Analysis* (London: Cape, 1936; reprinted, Indianapolis, Ind.: LibertyClassics, 1981).

²³Hayek, Foreword to Mises translation, *ibid.*, p. xix.

Mitchell's class on the history of economic thought and J. B. Clark's final seminar, in which Hayek gave the last paper.

Hayek also did some travelling. Joseph Schumpeter had been an exchange professor at Harvard before the war and provided Hayek with letters of introduction to a number of famous economic theorists, among them Clark, E. R. A. Seligman, Henry Seager, Thomas Carver, Irving Fisher, and Jacob Hollander. But the young visitor quickly learned that the ideas of many of the grand old men who had formulated much of economic theory were considered passé in the 1920s.

I must confess that from my predominantly theoretical interest the first impression of American economics was disappointing. I soon discovered that the great names that were household words to me were regarded as old-fashioned men by my American contemporaries, that work on their lines had moved no further than I knew already, and that the one name by which the eager young men swore was the only one I had not known until Schumpeter gave me a letter of introduction addressed to him, Wesley Clair Mitchell. Indeed business cycles and institutionalism were the two main topics of discussion.²⁴

Hayek spent some of his stay in the United States learning about economic forecasting. It was a popular new topic at the time, with institutes like the Harvard Economic Service (which regularly published a set of 'economic barometers' on the state of the economy) springing up everywhere. (Most of these institutes died out after failing to foresee the coming Depression.) His education consisted of learning some simple statistical techniques for smoothing times series data. Though suspicious of the value of empirical work for the scientific study of complex phenomena, Hayek always acknowledged that such techniques had practical uses. They also helped him land a job. When he returned to Austria, Hayek worked a while longer at his previous post. When the agency finally closed, Mises tried to get Hayek a position at the Chamber of Commerce. Failing this, Mises was able to obtain private funding to set up a business cycle institute in January 1927 with Hayek at its head. More significant for his later research, while in the United States Hayek also learned a considerable amount about the workings of the new Federal Reserve System. As he was later to recall, "it was in the studies

²⁴"The Economics of the 1920s as Seen from Vienna", which is the Prologue to *The Fortunes of Liberalism*, ed. Peter G. Klein, being vol. 4 of *The Collected Works of F. A. Hayek* (Chicago: University of Chicago Press and London: Routledge, 1992), pp. 35-36.

of my descriptive work on American monetary policy that I was led to develop my theories of monetary fluctuations".²⁵

One can see the broad outlines of Hayek's reaction to his trip to America in one of his first published papers, "Die Währungspolitik der Vereinigten Staaten seit der Überwindung der Krise von 1920" ["The Monetary Policy of the United States after the Recovery from the 1920 Crisis"].²⁶ The Federal Reserve System had been established in 1913 in the hope that centralized cash reserves might help mitigate financial panics of the types that had plagued the American economy in previous decades. By the 1920s, certain American economists had more ambitious goals: not merely to counteract crises already under way, but "to prevent cyclical and crisis phenomena from evidencing themselves at all".²⁷ Hayek thought that this was too ambitious an aim. Though it might be possible to restrict the cycle to narrower bounds than before, achieving its total elimination required more knowledge than then existed or might ever exist. The dangers with holding such unrealistically high expectations seemed evident to Hayek, too. If the goals were not met, political intervention might occur. Then the credit system "would constitute a source of continuous disturbances of economic life, instead of exerting a stabilizing influence upon it".²⁸

Hayek also offered a brief but telling reaction to institutionalism. He praised the institutionalists for clarifying the complex relationships among the data in a typical cycle, in particular for identifying rising consumer prices and an excess stock of capital goods as characteristics of the onset of the crisis stage. (For Hayek, these were the 'facts' that a theory of the cycle had to explain.) But he also faulted them for foreswearing an explicit theoretical framework, calling their work a type of "symptomatology" which is "of little help when what is at issue is not

detailed interconnections but the cause of cyclical fluctuations in general".²⁹

In any event, the burning question of the day for the American economics profession was a characteristically pragmatic one: What actions if taken by the central monetary authority hold the best chance of eliminating the cycle? Though different schemes were offered, stabilization of the general price level emerged as the favoured policy. If the price level (as measured by a statistically constructed index number) rose beyond a certain point, the Federal Reserve would raise the discount rate (and possibly also sell bonds in the open market to reduce the amount of currency outstanding; such "open market operations" were then still controversial in the United States) in an effort to slow economic activity. If the price level fell, the opposite procedure would be followed.

It was this apparently commonsensical approach to the control of credit that Hayek found objectionable.

The objection that appears to us to be much more serious is that the cyclical movement finds its initial expression not in the behaviour of the general price level but in that of the relative prices of the individual groups of commodities. Hence an index of the general price level cannot yield any relevant information as to the course of the cycle nor more importantly can it do so at the right time.³⁰

Hayek argued that if American institutionalist economists had only had a better theoretical grasp on the causes of the cycle, they would not have been misled by their statistics into making wrong-headed policy recommendations. And indeed, behind Hayek's criticisms lies a particular theory of the business cycle, one that had its origins in the monetary

²⁵F. A. Hayek, *Introduction to Money, Capital, and Fluctuations: Early Essays*, ed. Roy McCloughry (Chicago: University of Chicago Press and London: Routledge, 1984), p. 2.

²⁶"Die Währungspolitik der Vereinigten Staaten seit der Überwindung der Krise von 1920", *Zeitschrift für Volkswirtschaft und Sozialpolitik*, N. S. 5, in two parts, sections 1-3, 1925, pp. 25-63; sections 4-6, 1925, pp. 254-317. Section 6 has been translated and appears under the title, "The Monetary Policy of the United States after the Recovery from the 1920 Crisis", in McCloughry, ed., op. cit., pp. 5-32.

²⁷*Ibid.*, p. 5. Those responsible for directing Federal Reserve policy were more conservative in their aims; the ones with greater ambitions for government control included institutionalists like John R. Commons.

²⁸*Ibid.*, pp. 22-23. Given their experiences following the war, this latter point would have struck his German-language audiences as rather obvious.

²⁹*Ibid.*, pp. 6-7. Hayek's response to institutionalism was typical for someone who was trained in the Austrian tradition. For nearly forty years, the principal adversaries of the Austrians had been Schmoller and members of the Younger German Historical School, for whom data collection (albeit usually absent the sort of statistical analysis that the institutionalists advocated) was the method of the social sciences. Hayek's reaction was not altogether fair. Mitchell was no simplistic inductivist. Nor was institutionalism simply a transplanted historicism: It contained pragmatic and scientific elements as well. Though many Americans had fallen under the spell of the Historical economists when they studied overseas in the 1880s and 1890s, the lessons that they drew were varied.

³⁰*Ibid.*, p. 17.

writings of the Swedish economist Knut Wicksell,³¹ and which was further developed in the second (1924) edition of Mises's book on money.³² Hayek would spend the next few years articulating his own version of this Mises-Wicksell theory of the cycle.

Hayek's Theory of the Business Cycle³³

For Hayek, any adequate theory of the business cycle must be consistent with what he called "equilibrium theory". This theory states that in a free-market system, changes in underlying conditions of demand and supply bring about adjustments in relative prices, adjustments that continue until demand and supply in all markets are equalized. So long as relative prices are free to adjust, the price mechanism coordinates the actions of agents on both sides of any market.

One such market is the market for loanable funds, where the interests of savers and borrowers meet. In analyzing this market, Hayek used Wicksell's concept of a 'natural rate of interest', a rate that just equalizes savings and investment. The decision by households to save may also be viewed as a decision to forego present for future consumption. The funds saved are borrowed by firms for investment projects, that is, they are used for acquiring capital goods. The natural rate of interest coordinates the activities of these very different agents in a world in which production takes place through time. An example may help to make this clear.

Assume that there is an increase in a community's desire to save, that is, an increase in its preference for future over present goods. The natural rate of interest begins to fall, and firms discover that production processes that are more 'roundabout', that is, ones that take a longer

³¹Knut Wicksell, *Geldzins und Güterpreise: Eine Studie über die den Tauschwert des Geldes bestimmenden Ursachen* [1898], translated by R. F. Kahn as *Interest and Prices: A Study of the Causes Regulating the Value of Money* (London: Macmillan, 1936; reprinted, New York: Kelley, 1965); *Vorlesungen über Nationalökonomie* [1901, 1906], translated by E. Classen as *Lectures on Political Economy* (London: George Routledge & Sons, 1934, 1935; reprinted, Fairfield, N. J.: Kelley, 1977, 1978).

³²Mises, *Theorie des Geldes und der Umlaufsmittel*, op. cit.

³³The following summary synthesizes aspects of two of Hayek's early works on the cycle, *Geldtheorie und Konjunkturtheorie* (Vienna and Leipzig: Hölder-Pichler-Tempsky, 1929), translated by N. Kaldor and H. M. Croome as *Monetary Theory and the Trade Cycle* (London: Cape, 1933; reprinted, New York: Kelley, 1966), and *Prices and Production* (London: Routledge and Sons, 1931). Changes in this theory that may have taken place as a result of discussions with his critics in the 1930s are addressed in other volumes of *The Collected Works of F. A. Hayek*.

time to produce consumer goods, become profitable. A fundamental claim within the Austrian theory of capital (as developed by Eugen Böhm-Bawerk) is that more roundabout methods are also more productive ones. The movement to more roundabout methods allows firms to produce more goods in the future, thereby meeting the desires of consumers. The natural rate of interest, then, is itself a relative price. Its changes serve to coordinate a community's preferences concerning present and future consumption with the production processes that create the goods.

The theory also focuses on what is termed 'the structure of production'. 'Investment' does not simply mean the addition of more machines. Rather, the movement to more roundabout methods of production involves a change in the relative prices of a whole range of producer's goods, and these price changes bring about a change in the structure of the capital stock. In Austrian terminology, 'goods of a higher order', that is, capital goods that are further away (in time) from the production of first-order consumption goods, are added; the structure of production is lengthened. This change in the structure of capital would play a crucial role in the Austrian theory of the cycle.³⁴

The price mechanism, then, coordinates economic activity. In a trade cycle, economic activity somehow becomes uncoordinated. In particular, in the crisis stage of the cycle an overproduction of capital goods exists. As such, any adequate theory of the cycle must explain how this situation of disequilibrium in this specific market arises. What keeps the interest rate from performing its coordinative function?

Once again Wicksell's framework proved helpful. Wicksell posited another interest rate, the 'market rate of interest'. The market rate is influenced by banks' lending activities and can differ from the natural rate: Specifically, it will fall below the natural rate whenever banks increase the amount of credit. Wicksell used the natural rate/market rate distinction to discuss movements in the general price level. The Austrian contribution was to posit the deviation of the market rate from the natural rate as the cause of the trade cycle.³⁵

³⁴In his original formulation, Hayek used Böhm-Bawerk's notion of an 'average period of production'. He replaced this with the 'structure of production' in *The Pure Theory of Capital* (London: Routledge and Kegan Paul, 1941; reprinted, Chicago: University of Chicago Press, 1975).

³⁵Mises and Hayek provided different accounts of the origins of the cycle. Mises blamed the cycle on the actions of bankers, especially central bankers eager to finance government activities by printing money. For Hayek, the cycle was a virtually unavoidable consequence of a credit economy. The expansion of credit could be due to a spontaneous action by bankers. But it also could be induced by an increase in the demand for loanable

A typical cycle unfolds as follows. Banks expand credit, lowering the market rate of interest to induce firms to borrow. Firms use their newly created purchasing power to begin lengthening the process of production, just as if there had been a fall in the natural rate. In a world in which all resources are fully utilized, this bids resources away from consumers. However, unlike the example in which the natural rate had fallen, consumers have not *voluntarily* reduced their real desired consumption. They are *forced* to consume less than they desire; Hayek accordingly attached the term 'forced savings' to this phenomenon. The partially unmet demand for current consumption goods begins to push up the prices of such goods relative to future goods, or, put another way, the market rate of interest begins to rise. This signals firms that their previous decisions to undertake more roundabout investment projects had been incorrect, that the demand for future goods had not truly risen. The more roundabout projects are no longer profitable and must be abandoned before they come to fruition. This initiates the crisis, or slump, phase of the cycle.

The only way to avoid the cycle is to 'neutralize' the effects of credit creation by keeping the market rate equal to the natural rate. Hayek put it succinctly: "Not a money which is *stable* in value but a *neutral* money must therefore form the starting point for the theoretical analysis of monetary influences on production..."³⁶ Alas, as a practical matter, keeping money neutral is easier said than done: No one knows what the natural rate is; only the market rate is observable.

Hayek was not optimistic about the prospects for effective counter-cyclical policy. The policy recommendation being considered most widely at the time (to watch the general price level, and to change the growth rate of the money supply in the opposite direction whenever the price level showed movement) would almost certainly exacerbate the cycle. Hayek believed that if the monetary authorities tried to keep the price level stable in an expanding economy (he associated falling prices with expansion), they would end up injecting too much credit, setting off a boom. Nor would other methods, like monitoring the amount of credit in the system (for example, by setting limits on bank reserves), be effective, since variability in the demand for credit would undermine any control that the monetary authorities might possess. Finally, Hayek's

funds by firms (that is, an increase in the velocity of circulation) caused by increased business optimism, or the discovery of some new product or process, or a change in the structure of production, or a change in the form of credit: any of these could render money 'non-neutral'. See Hayek, *Monetary Theory and the Trade Cycle*, op. cit., chapter 4; *Prices and Production*, op. cit., Lecture 4.

³⁶Hayek, *Prices and Production*, op. cit., pp. 27-28.

theory implied that just prior to the onset of the crisis, consumer prices would begin to rise. If this rise were reflected in a rising aggregate price level, the monetary authorities might be induced to put on the brakes just as the economy was sliding into a recession, thereby making the cycle worse.

Once the crisis had started, Hayek felt that the best policy was simply to allow it to play itself out. Attempts to stimulate the economy through further injections of money would only keep the market rate artificially lowered that much longer, further distorting the structure of production, prolonging and deepening the crisis. Attempts to stimulate consumer demand would likewise be adding fuel to the fire, since excessive consumption demand was a characteristic of this stage of the cycle. Indeed, the slump stage of the cycle was the painful medicine by which equilibrium in the system was ultimately restored. As Ludwig Lachmann was later to observe, Hayek's early vision of how the cycle played out was preeminently a general equilibrium one:

For Hayek Paretian general equilibrium was the pivot of economic theory, the centre of gravity towards which all major forces tended. For him the task of trade cycle theory was to show how it came about that these major forces were temporarily impeded and their effects delayed, and since the cycle was supposed to start with a boom and end with a depression, he saw in the depression the ultimate triumph of the equilibrating forces.³⁷

Hayek spent the late 1920s working out the details of the theory, with the hope that his efforts might help to secure him a university professorship. To qualify for his *Habilitation*, he first had to write a book; *Geldtheorie und Konjunkturtheorie* was the result.³⁸ Hayek next underwent the *Habilitation* defense, a public presentation in which members of the faculty cross-examine the candidate on a work of his choice. The paper Hayek chose for this occasion was "Gibt es einen 'Widersinn des

³⁷Ludwig Lachmann, "Austrian Economics under Fire: The Hayek-Sraffa Duel in Retrospect", in *Austrian Economics: History and Philosophical Background*, Wolfgang Grassl and Barry Smith, eds (London: Croom Helm, 1986), p. 227. See pp. 225-242 for additional discussion. It was not until the mid-1930s that Hayek began his retreat from the general equilibrium framework, a move that culminated in his developing a 'market process' view of the workings of the price system. For more on this see Bruce Caldwell, "Hayek's Transformation", *History of Political Economy*, vol. 20, Winter 1988, pp. 513-541.

³⁸Translated as *Monetary Theory and the Trade Cycle*, op. cit.

Sparsens'?", a translation of which is reprinted as chapter 2 in this volume. His presentation was well received, and Hayek became a *Privatdozent* in 1929.³⁹ For the next two years, in addition to his work at the business cycle institute (where he was joined by Oskar Morgenstern, who became his successor), Hayek taught classes at the University of Vienna. As he mentions in "The Economics of the 1930s as Seen from London", reprinted as chapter 1 of this volume, in his spare time Hayek produced a number of chapters on the monetary history of England for a massive text on money that he was writing. The book was never published; the editors abandoned it after the Nazis came to power.

The 'Paradox' of Saving

"The 'Paradox' of Saving" is a direct result of Hayek's American experiences. His recounting of the inventive promotional efforts of the now-forgotten Messrs Foster and Catchings makes for fascinating and entertaining reading. These two authors of numerous popular tracts were underconsumptionists: For them, the cause of the business cycle was excessive saving. The surfeit of savings flows into investment, which allows firms to increase their production of consumption goods. Alas, firms become too productive, so that the purchasing power in the hands of consumers is insufficient to buy up all of the new goods that have been produced. A glut of consumption goods appears on the market, and this constitutes the crisis stage of the cycle. Foster and Catchings's policy advice was straightforward: It is the obligation of the government to even out fluctuations in the demand for consumer goods. This requires that the government run deficits, which they recommended be financed by an expansion of the money supply, during times of crisis.

It is evident why Hayek would find such a theory and the attendant policy recommendations unsatisfactory. As he points out early in the article, underconsumptionist theories of the business cycle, though rejected by the majority of economists since the early 1800s, nonetheless have a way of periodically reemerging, especially in popular tracts by

³⁹A *Privatdozent* merely had the right to teach at the university. To become a professor, one of the chairs (of which there were only three in economics at this time at the University of Vienna) had to be vacated, and one had to be chosen to fill it. For more on the intricacies and political intrigues of Austrian academic life, see F. A. Hayek, *Hayek on Hayek*, Stephen Kresge and Leif Wenar, eds (Chicago: University of Chicago Press and London: Routledge, 1994), pp. 51-56, p. 60; also Earlene Craver, "The Emigration of the Austrian Economists", *History of Political Economy*, vol. 18, Spring 1986, pp. 1-32.

non-economists. From a specifically Austrian perspective, Foster and Catchings's theoretical framework failed to grasp the role of interest rates in coordinating intertemporal consumption decisions.

Hayek felt confident that he had effectively countered Foster and Catchings's arguments. What he found more worrisome was the response of the rest of the economics profession to the policy conclusions that the Americans had proffered. Hayek was clearly exasperated by the outcome of the Prize Essay contest that the pair had set up, in which \$5000 was awarded to the best criticism of their theory. Virtually none of the critics had challenged the proposition that an increase in the money supply proportional to the enlarged volume of production was an appropriate response to a slump. His own theory implied, of course, that an increase in the money supply once the slump had begun would only prolong and deepen the crisis.

Lionel Robbins and the LSE

Lionel Robbins was the newly appointed head of the Economics Department at the London School of Economics (LSE) as well as the youngest Professor of Economics in England. The LSE had been established in the 1890s by Fabian Socialists. Founders Sidney and Beatrice Webb were so convinced that the (socialist) truth would win out that they insisted that ideology should play no role in appointments at the School. An important motive in the founding of the LSE was to provide a counterweight to the theoretical approach being advanced by men like Alfred Marshall at Cambridge. It would be broadly correct to say that at the beginning of the century the historical approach was identified with London and the theoretical with Cambridge. By the 1920s, however, Marshallian economics and methods had emerged nearly uniformly victorious throughout Britain. A sensitivity to the importance of history (though not, as Hayek is quick to remind us in his portrait of Edwin Cannan that is an addendum to chapter 1 in this volume, an advocacy of the methods of historicism) remained strong at the LSE, embodied as it was in the persons of Cannan and Herbert Foxwell. In addition, the Director of the School, William Beveridge, felt an unremitting antipathy towards theory.

Lionel Robbins was intent on changing this. He wanted to establish the LSE as a center for theory. He did not want the institution to become a Cambridge on the Thames, however. Robbins deplored the insularity of English economics. At Oxford and Cambridge, this narrowness had its origins in the complacent belief that all one needed to know about economics could be found in Marshall's writings. To the

extent that it existed in London, it followed (as Hayek tells us) from the preferences of Edwin Cannan. But Marshall had died in 1924, and Cannan had retired in 1926. From Robbins's perspective, the time was surely ripe for instituting at the LSE an approach to economics that was at once more theoretical and more cosmopolitan.

Robbins had yet another battle on his hands, this one with that most formidable of opponents, John Maynard Keynes. Keynes had invited Robbins in the late summer of 1930 to sit on a committee of the newly instituted Economic Advisory Council. The EAC was a large body; the smaller 'Committee of Economists' formed at Keynes's instigation was a select group, with Arthur Pigou, Josiah Stamp, and Hubert Henderson comprising the other members. The committee was to meet in private, and its final report was to be secret. Its brief was to come up with policies to combat the Depression, and Keynes hoped to use the committee to promote his own views. It was soon evident that Robbins disagreed with the rest of the committee both in his diagnosis of the origins of the downturn and in his recommendations for policy. He tried, unsuccessfully, to get the committee to hear evidence from others (Hayek among them) whose views were more in accord with his. After considerable effort, the committee was able to reach some common ground in its final report. But Robbins refused to go along with a proposed tariff on imports and requested permission to write a minority report on the issue. Keynes, furious, at first refused, claiming that a rule prohibited minorities of one from filing separate reports. When it was clear that Robbins would not be budged, and that Keynes's rule was, as Robbins later put it, "pure mythology", the elder economist finally relented. Keynes, however, reserved the last word to himself and read aloud to the committee his letter to the ministers 'explaining' the true reason for Robbins's dissent: "Robbins has a scruple of conscience about which he has worked himself up to a high degree of emotional feeling."⁴⁰

The youthful Lionel Robbins was battling on a number of fronts and he was looking for allies. To counter the emphasis on history at the LSE, he sought first and foremost a qualified theorist. But he also wanted an economist who was conversant with other traditions, so that the LSE could become a leader in the internationalization of British

⁴⁰Keynes's quote can be found in *Activities 1929-1931: Rethinking Employment and Unemployment Policies*, op. cit., p. 464. Robbins's typically mild account of the event is contained in his *Autobiography of an Economist* (London: Macmillan, 1971), pp. 150-156; cf. Susan Howson and Donald Winch, *The Economic Advisory Council 1930-1939: A Study in Economic Advice during Depression and Recovery* (Cambridge: Cambridge University Press, 1977), pp. 46-72.

economics. He finally needed someone who might serve as a counterweight to J. M. Keynes. Friedrich Hayek certainly seemed to fit the bill. Though he could not get permission for Hayek to appear before the Committee of Economists, he was able as department head to invite him to give a series of lectures at the LSE. And that is exactly what Robbins did.

Hayek arrived in London in February 1931. His lectures, which would later appear in published form as *Prices and Production*, had been hurriedly prepared. His English was little less than awful. (He was later told that he was all but incomprehensible whenever he was reading, but became intelligible when he paused to answer a question.) Despite all that, the lectures caused a huge stir; Hayek was offered first a one-year visiting professorship, and in the next year the Tooke Chair of Economic Science and Statistics.⁴¹ During the same period he began preparing an assessment of Keynes's latest foray into economic theory, *A Treatise on Money*, the book that had provided the theoretical underpinnings for Keynes's policy proposals. As has long been the way among academic economists, the many differences between Hayek and Keynes would be fought out in that most indirect and rarefied of conflicts, a clash of theoretical models.

The Battle Is Joined

A Treatise on Money

Soon after completing the *Tract on Monetary Reform*, and probably beginning in July, 1924, Keynes began outlining what ultimately was to be his *A Treatise on Money*.⁴² He worked on his 'egg' through the 1920s, receiving much feedback on early drafts of chapters from his old friend Dennis Robertson. The manuscript was finally finished in July, 1929, but a lengthy process of revision resulted in such extensive changes that the final version was split into two volumes and not released until October 31, 1930. One can see from his preface that Keynes was not particularly satisfied with the final result.

⁴¹Hayek's account of his trip to London may be found in *Hayek on Hayek*, op. cit., pp. 75-78.

⁴²J. M. Keynes, *A Treatise on Money*, 2 vols [1930], reprinted as vols 5 and 6 (1971) of *The Collected Writings of John Maynard Keynes*, op. cit.

As I read through the page proofs of this book I am acutely conscious of its defects. It has occupied me for many years...during which my ideas have been developing and changing.... The ideas with which I have finished up are widely different from those with which I began. The result is, I am afraid, that there is a good deal in this book which represents the process of getting rid of the ideas which I used to have and of finding my way to those which I now have.⁴³

The new ideas that Keynes was "finding his way" towards were, in the main, his views on policy. The problem with the *Treatise* was that Keynes's theoretical framework had not caught up with them.⁴⁴

Keynes hoped that the *Treatise* would be the work to bring him recognition as an economic theorist equal to that he already enjoyed as an essayist, gadfly to policymakers, shaper of opinion, and prominent public figure. He also hoped to construct a theoretical edifice that reflected his policy views. Unfortunately the latter had evolved so quickly in the 1920s that he could not keep the two in tandem. Still, he was not altogether unsuccessful. Using the well-known "Fundamental Equations", Keynes argued that a failure of adjustment between savings and investment was the principal cause of problems for modern monetary economies. This at least had certain affinities with his policy view that Britain's problems in the 1920s resulted in insufficient domestic investment spending.

But Keynes was still partly stuck in a Marshallian world. His analysis implicitly assumed that total output was given, so that all adjustments would come through prices. This, of course, made it rather difficult to discuss the problem of unemployment that so vexed him. When the "Slump of 1930" was analyzed, he saw it as a special case in which high interest rates brought on by the return to gold and by problems associated with the payment of reparations generated the downturn.⁴⁵ Just as hard cases make for bad law, special cases do not make for good

⁴³*Ibid.*, p. xvii.

⁴⁴This was not a new problem for Keynes (though it was, perhaps, the first time that he had come to recognize that it was a problem). Along with brilliant discussions of the distributional effects of changes in the value of money, of forward markets for foreign exchange, and of alternative aims of policy, his earlier *Tract* had contained a straightforwardly Marshallian section on monetary theory, one that bore little resemblance to the subtle and complex reasoning that Keynes displayed elsewhere in the volume.

⁴⁵The discussion occurs in a short section entitled "The Slump of 1930", *A Treatise on Money*, op. cit., vol. 6, pp. 338-347. As noted by Robert Dimand in *The Origins of the Keynesian Revolution: The Development of Keynes's Theory of Employment and Output* (Aldershot: Edward Elgar, 1988), pp. 30-35, Keynes discussed downwardly rigid nominal wages at two places in the *Treatise*, but he never linked this up to a theory of unemployment.

theory. It was not until *The General Theory* that output and employment effects, rather than price effects, became central concerns in Keynes's theoretical work. As he was to put it in the Preface, it was then that his long "struggle of escape from habitual modes of thought and expression" was finally complete.⁴⁶ Helping him to make his escape was a group of young economists at Cambridge who were known collectively as 'the Circus'.

The Cambridge Circus

A few weeks after the *Treatise* was published, a group of young academics began meeting in the rooms of Richard Kahn to discuss and criticize it. Members included Piero Sraffa, aged 32, whom Keynes had helped bring to Cambridge from Italy (Sraffa had translated the *Tract* into Italian) and whose 1926 article criticizing Marshall's theory of the firm sparked considerable debate among English economists in the late 1920s;⁴⁷ Joan Robinson, aged 27, who two years later would publish *The Economics of Imperfect Competition*,⁴⁸ her husband, Austin, aged 33, who became Keynes's assistant editor at the *Economic Journal* in 1934 and later acted as managing editor for Keynes's *Collected Writings*; and James Meade, aged 23, a visitor from Oxford whose distinguished career in international economics would earn him the Nobel Prize in 1977. The Circus met through May of 1931, gradually becoming more formal (meeting in a seminar room) and expanding to include a few of the best undergraduate students (by invitation, and only after surviving an interview by the screening committee of Austin Robinson, Kahn, and Sraffa). Keynes never attended the meetings. Instead, Kahn would report the results of the discussions to him, then return to the group with his replies. Though accounts differ as to the exact role the Circus played in the evolution of *The General Theory*, it is clear that its members were of great assistance in challenging Keynes to rethink his ideas, and in particular in getting him to see that the framework of the *Treatise* assumed a given level of output.⁴⁹ Later, some of their number

⁴⁶J. M. Keynes, *The General Theory of Employment, Interest, and Money* [1936], reprinted as vol. 7 (1973) of *The Collected Writings of John Maynard Keynes*, op. cit., p. xxiii.

⁴⁷Piero Sraffa, "The Law of Returns under Competitive Conditions", *Economic Journal*, vol. 36, December 1926, pp. 535-550.

⁴⁸Joan Robinson, *The Economics of Imperfect Competition* (London: Macmillan, 1933; 2nd edition, London: Macmillan, 1969).

⁴⁹There are no records of what went on in the meetings of the Circus. The account in Donald Moggridge, "The Cambridge Circus, 1930-1", in *The General Theory and After: Part I, Preparation*, ed. Donald Moggridge, vol. 13 (1973) of *The Collected Writings*, op. cit., pp.

would be instrumental in helping to demolish Keynes's critics and in spreading the Keynesian gospel in Britain. But we get ahead of our story.

Hayek gave his lectures on "Prices and Production" at the LSE in February of 1931. While he was in England, he agreed to give a talk to the economists at Cambridge. Keynes was not present, but members of the Circus were, including Joan Robinson. In her Richard T. Ely Lecture to the American Economics Association in 1971, entitled "The Second Crisis of Economic Theory", she described the session in this way:

While the controversy about public works was developing, Professor Robbins sent to Vienna for a member of the Austrian school to provide a counter-attraction to Keynes. I very well remember Hayek's visit to Cambridge on his way to the London School. He expounded his theory and covered the blackboard with his triangles. The whole argument, as we could see later, consisted in confusing the current rate of investment with the total stock of capital goods, but we could not make it out at the time. The general tendency seemed to be to show that the slump was caused by inflation. R. F. Kahn, who was at that time involved in explaining that the multiplier guaranteed that savings equals investment, asked in a puzzled tone, "Is it your view that if I went out tomorrow and bought a new overcoat, that would increase unemployment?" "Yes", said Hayek. "But", pointing to his triangles on the board, "it would take a very long mathematical argument to explain why".

This pitiful state of confusion was the first crisis of economic theory that I referred to.⁵⁰

It is hard to imagine that Hayek was unable to explain the link between rising consumer prices and the slump, a link that was central

337-343, was based on an interview in 1971 of the five principals. Some question a lionizing of the Circus: For example, Don Patinkin, in "Keynes's Monetary Thought: A Study of Its Development", *History of Political Economy*, vol. 8, Spring 1976, p. 60, doubts James Meade's "cautiously confident" claim that when he returned to Oxford in the fall of 1931 he took back with him all of the essential ingredients of *The General Theory*.

⁵⁰Joan Robinson, "The Second Crisis of Economic Theory", in *Contributions to Modern Economics* (New York: Academic Press, 1978), pp. 2-3. "His triangles" refers to the diagrams Hayek used to represent lengthening of the structure of production. Kahn is more generous in his reminiscences: "It is only fair to Hayek to mention that he had to condense the four lectures into one, and that they were written when he had a high temperature". See Richard F. Kahn, *The Making of Keynes's General Theory* (Cambridge: Cambridge University Press, 1984), p. 182.

to his theory.⁵¹ Perhaps the illness that Kahn alludes to in his recollection of the day was to blame, or perhaps his command of English was still shaky and he didn't quite understand the question. He might even have sensed hostility coming from some of the audience, which might have affected his ability to think on his feet. But no matter what caused Hayek to respond in the way that Robinson reports, her mean-spirited comments, delivered nearly forty years after the event and at a time when the Keynesian paradigm was still dominant (though not, to be sure, Robinson's version of it—her label for a follower of the standard model was "bastard Keynesian"), bear the stamp of the nastiness that Hayek was to encounter in certain quarters of the English academic community.

Hayek's Review of the *Treatise*

The reader who has not made an extensive comparative study of Keynes's *A Treatise on Money* and Hayek's *Prices and Production* (and perhaps even some who have) may find that certain of the arguments in the exchange between them (reprinted as chapters 3 to 6 of this volume) are somewhat obscure. There are moments of tedium, as well, as each spends pages quibbling over the definitions of terms. If one gets beyond the definitional quagmire, however, it turns out that their models share many similarities. The essential theoretical difference between them is that Hayek integrates capital theory into his model, and Keynes does not.

Two features of Keynes's "Fundamental Equations" deserve emphasis. First, the natural rate of interest is that rate at which savings and investment are equal. This is the same in Hayek, though their definitions of savings and investment differ; hence the disputes over terminology. Second, 'windfall' entrepreneurial profits (losses) exist by definition whenever investment exceeds (is less than) savings. Thus for Keynes, in equilibrium, savings equals investment and windfall profits (in the aggregate) are zero. If the market rate of interest drops below the natural rate, spending by firms on new investment projects increases, investment spending exceeds savings, and windfall profits appear. Keynes

⁵¹A brief response to Kahn might have been: Your individual actions do not, of course, matter. However, if the government provides consumers with credit to expand their demand for raincoats and other consumer goods, firms will try to shorten the structure of production that much more quickly, causing unemployment in the capital goods industries to rise further. In addition, if consumption demand reaches an unsustainably high level, the structure of production will be shortened too much, ensuring additional readjustment problems in the future.

called this "profit inflation". Next, firms typically⁵² begin to compete with each other to expand production. Because all resources are fully employed, this simply causes factor prices (wages) to be bid up, a phenomenon Keynes dubbed "income inflation". The final result is one that any Cambridge quantity theorist would predict: An increase in the money supply ultimately increases the price level proportionately. In this sense, the barebones model of the *Treatise* is simply Marshall with a Wicksellian twist, a twist that allowed Keynes to focus on the role of the interest rate in an economy with a developed banking system. We will see, however, that (just as in the *Tract*) Keynes's discussions in the *Treatise* of real-world complications often went far beyond his bare-bones model.

As the early part of his review makes clear, Hayek did not accept the set of definitions contained in Keynes's Fundamental Equations. But he did agree that a lowering of the market rate of interest below the natural rate causes entrepreneurs to increase investment spending, resulting in investment exceeding savings. It is at this crucial juncture, though, that their stories diverge. In contrast to Keynes's loose description of profit and income inflation, Hayek's model includes a detailed account of a specific sequence of changes in the prices of capital goods and consumption goods, a sequence that follows from the Austrian theory of capital. In addition, the capital theory that Hayek used and that was so noticeably absent in Keynes's was one that was familiar to Wicksell, whose first book had been an attempt to integrate the Austrian theory of capital and marginal productivity theory within a general equilibrium framework. Only after that was completed had he turned, in his second book, to a discussion of money.⁵³ From Hayek's perspective, Keynes had simply lifted the interest rate story out of its original context. Finally, by reintroducing the capital-theoretic structure, Hayek was able to construct a full-blown theory of the trade cycle. Keynes's *Treatise* was less successful in that it followed the more traditional

⁵²Though not necessarily: If entrepreneurs choose to consume out of their profits, the "widow's cruse" phenomenon occurs. See Keynes, *A Treatise on Money*, vol. 5, op. cit., p. 125.

⁵³Knut Wicksell, *Über Wert, Kapital und Rente*, translated by S. H. Frowein as *Value, Capital and Rent* [1893] (London: Allen & Unwin, 1954; reprinted, New York: Kelley, 1970); and *Interest and Prices*, op. cit. As Hayek put it (this volume, chapter 3, p. 130), "Mr. Keynes ignores completely the general theoretical basis of Wicksell's theory". Gunnar Myrdal offered a less generous critique, calling the *Treatise* an example of "the attractive Anglo-Saxon kind of unnecessary originality, which has its roots in certain systematic gaps in the knowledge of the German language on the part of the majority of English economists". Quoted in Patinkin, "Keynes's Monetary Thought: A Study of Its Development", op. cit., p. 49.

approach of explaining changes in the price level without systematically addressing the question of how output changes over the course of the cycle.

Hayek's attack on Foster and Catchings had also been from the perspective of the Wicksell-Mises theory of the cycle. But because his framework there was so different from that used by his opponents, readers unfamiliar with the Austrian approach would have had a difficult time following Hayek's argument. In contrast, Keynes had borrowed explicitly from Wicksell and, from an Austrian point of view, the borrowing was gratuitous. Hayek's job as critic was vastly simplified by Keynes. He might as well have painted a bull's eye on the cover of the *Treatise*.

Keynes Responds to Hayek

As one of his biographers attests, Keynes was not pleased with the review:

Keynes was obviously very unhappy with the August part of the review, for his copy of that issue of *Economica* is among the most heavily annotated of the surviving copies of his journals, with no less than 34 pencilled marks or comments on the 26-page review. At the end of the review, Keynes summed up his reaction by writing: "Hayek has not read my book with that measure of 'good will' which an author is entitled to expect of a reader. Until he can do so, he will not see what I mean or know whether I am right. He evidently has a passion which leads him to pick on me, but I am left wondering what this passion is".⁵⁴

Keynes's irritation is evident in his reply, published in November 1931 and reprinted as chapter 4 in this volume. That Keynes insisted on answering his critic before the second half of Hayek's review was even published suggests his anger, as does his strategy of using a reply to attack Hayek's own *Prices and Production*. And what an attack it was! Keynes characterized *Prices and Production* as follows:

The book, as it stands, seems to me to be one of the most frightful muddles I have ever read, with scarcely a sound proposition in it

⁵⁴*The General Theory and After: Part I, Preparation*, op. cit., p. 243. If one compares Keynes's reaction to Hayek's review with his response to Robbins's dissent from his policy prescription (this volume, p. 20), it would seem that Keynes was prone to interpret disagreement with his views as evidence of an overwrought state of mind.

beginning with page 45, and yet it remains a book of some interest, which is likely to leave its mark on the mind of the reader. It is an extraordinary example of how, starting with a mistake, a remorseless logician can end up in bedlam. Yet Dr. Hayek has seen a vision, and though when he woke up he has made nonsense of his story by giving the wrong names to the objects which occur in it, his Khubla Kahn is not without inspiration and must set the reader thinking with the germs of an idea in his head (this volume, p. 154).

This is wonderful phrase-turning, Keynes at his witty bitchy best. But for the preeminent English economist and editor of the prestigious *Economic Journal* to reply in such a manner to a junior scholar's lengthy critical review is, it must be said, pretty shabby. The reaction of Pigou is perhaps an appropriate rebuke:

Are we, in our secret hearts, wholly satisfied with the manner, or manners, in which some of our controversies are carried on? A year or two ago, after the publication of an important book, there appeared an elaborate and careful critique of a number of particular passages in it. The author's answer was, not to rebut the criticisms, but to attack with violence another book, which the critic had himself written several years before! Body-line bowling! The method of the duello! That kind of thing is surely a mistake.⁵⁵

Pigou was a bit shaky on his chronology, but his sentiments are clear enough. Whether one agreed with him or not, one thing was certain: A battle had begun.

If one pushes past the pyrotechnics and the definitional disputes, it seems that Keynes's substantive points were two. First, he conceded Hayek's claim that the *Treatise* lacked a capital-theoretic foundation. Since a number of Hayek's criticisms dealt with this deficiency, this appears at first to be a huge concession. Keynes softened the impact of his admission by adding that no complete theory of capital was yet available (Hayek would have agreed here). Keynes also appears to think that about all capital theory is good for is to explain the level of the natural rate of interest. This indicates that he had not grasped the crucial role given to capital in the Austrian theory of the cycle.

⁵⁵A. C. Pigou, *Economics in Practice* (London: Macmillan, 1935), pp. 23–24. Jacob Viner thought that Keynes's treatment of Hayek was "very unmannerly", but that one should not have been surprised by it. Letter to Hayek, February 20, 1932, in the Jacob Viner papers in the Princeton University Library.

But little of that mattered. For Keynes's second claim was that Hayek had misunderstood in a fundamental way the thrust of the *Treatise*, and that many of Hayek's criticisms were therefore misdirected. What Hayek had missed, according to Keynes, was the claim that savings and investment could "get out of gear" within the framework of the *Treatise* for any of a number of reasons that were independent of changes in the amount of credit in the system. Keynes suggested that Hayek's misreading was due to his being trapped within an old framework, one in which only changes in credit could cause savings to differ from investment. Exposing Hayek's flawed framework was then Keynes's excuse for reviewing *Prices and Production*. How justified were Keynes's complaints?

Here, I think, the two principals mostly missed one another. Keynes was quite right to assert that the *Treatise* contains numerous discussions of why, in the real world, the bare-bones model might fail to function in the manner outlined above. He had argued in the book, for example, that savers and entrepreneurs are different people with different motivations, so that savings and investment can get out of gear on their own; that expectations play an important role, especially in financial markets; that indeed the old quantity theory relation between the money supply and the price level would hold only in theoretical equilibrium.⁵⁶

But Keynes's claims notwithstanding, many sources of disturbance were possible within Hayek's model, too. One reason that Keynes may have missed this point is that he focused on *Prices and Production*, where the origins of the cycle take a back seat to the changes in the structure of production that constitute the cycle. In the fourth chapter of his earlier (and at that time available only in German) *Geldtheorie und Konjunkturtheorie*, Hayek described things other than the actions of banks that could cause, in Keynes's later terminology, the "marginal efficiency of capital" curve to shift.⁵⁷ But Keynes was right to say that for Hayek, the effects

⁵⁶These discussions are scattered throughout the *Treatise*, op. cit.; see especially chapters 10–12.

⁵⁷Hayek, *Geldtheorie und Konjunkturtheorie*, translated as *Monetary Theory and the Trade Cycle*, op. cit., pp. 142–152, 167–170. Hayek had sent Keynes a copy of the German version of *Monetary Theory* back in 1929, and Keynes's postcard acknowledging receipt may explain why he misunderstood Hayek: "Many thanks for sending me a copy of your book. I have been particularly interested in the last chapter. But I find your German dreadfully hard to make out!..." Postcard, Keynes to Hayek, March 26, 1929, in the Hayek collection, The Hoover Institution Archives, Stanford, Calif. Allin Cottrell points out the similarity of Hayek's discussion to Keynes's on the "marginal efficiency of capital" in his paper, "Hayek's Early Cycle Theory Re-examined", *Cambridge Journal of Economics*, vol. 18, April 1994, p. 199.

of the shift will necessarily be *transmitted* through the credit system: It cannot be otherwise in a monetary economy.

For his part, Hayek seems to have had the better part of the argument in showing that, though Keynes had asserted that savings and investment could get out of gear, he had not demonstrated how this could occur within the model described in the *Treatise*. This was the major thrust of the second part of Hayek's review, published in February 1932 and reprinted as chapter 6 of this volume.

Soon after the November exchange, Hayek and Keynes began a correspondence on the merits of their two frameworks.⁵⁸ Keynes's last letter in this exchange was dated March 29, after the second half of Hayek's review of the *Treatise*, as well as Sraffa's review of *Prices and Production*, had appeared. Keynes wrote in part:

Having been much occupied in other directions, I have not yet studied your *Economica* article as closely as I shall. But, unless it be on one or two points which can perhaps be dealt with in isolation from the main issue, I doubt if I shall return to the charge in *Economica*. I am trying to re-shape and improve my central position, and that is probably a better way to spend one's time than in controversy.⁵⁹

Keynes never did return to the charge, so Hayek probably felt that he had won the day. This letter is the source, too, for Hayek's later comment that since Keynes had "changed his mind" about the *Treatise*, and would probably do the same in regard to the arguments of *The General Theory*, there was little incentive to write a review of the latter book. Keynes had *not* changed his mind, of course, about the fact that intervention was necessary if capitalism was to survive. But it seems evident that by early 1932 he had given up the hope that his views could be expressed within the framework of the *Treatise*, and he was prepared to begin the hard work of constructing another one.

A final point about the battle. Hayek is sometimes interpreted as suggesting that 'neutral money' should somehow be used as a guide to policy, that the monetary authorities should try to keep the supply of money, in Keynes's phrase, "absolutely and forever unaltered".⁶⁰ But Hayek's point was actually a much more pessimistic one. The monetary authority is unable to control the supply of credit with sufficient

⁵⁸The correspondence from this period is reprinted as an Appendix to chapter 5, this volume.

⁵⁹See Appendix to chapter 5, this volume, letter no. 13, Keynes to Hayek, March 29, 1932.

⁶⁰See chapter 4, this volume, p. 153.

precision to set the market rate equal to the natural rate, and even if it were, the natural rate is not itself an operational construct: It is in fact unknowable. Hayek's fundamental point is that the business cycle is an unfortunate but unavoidable concomitant of a credit economy. He hoped that the severity of its swings could be lessened somewhat, mostly through a better understanding of the phases of a typical cycle rather than through the use of policy. Attempts to eliminate it, and particularly those that he had seen discussed in the United States and England, were likely to only intensify its effects. As he later would put it, with characteristic modesty:

[W]hat I had done had often seemed to me more to point out barriers to further advance on the path chosen by others than to supply new ideas which opened the path to further development.⁶¹

In early 1932, Hayek appeared to be the victor in the theoretical battle. His model, though unfamiliar to his English audience, at least seemed the more coherent. But was it the right model, did it really constitute a general theory of the cycle? If it did not, were Hayek's pessimistic policy views then mistaken, and Keynes, whose model was insufficiently worked out, really right after all? These were the questions that taxed economists in London and Cambridge in the spring of 1932. Disagreement over the matter would not last for long.

A Short Campaign

Explaining the Keynesian Ascendancy

Mark Blaug has suggested that "it is the amazing rapidity of the Keynesian ascendancy that poses the problem for any convincing account of the Keynesian revolution".⁶² Blaug provides a multiplicity of reasons for why so many members of the economics profession so easily and quickly converted to the Keynesian creed. In reviewing the most important of these, it will be useful to compare the reasons for Keynes's success against those for Hayek's failure.

⁶¹F. A. Hayek, Foreword to Gerald O'Driscoll, *Economics as a Coordination Problem* (Kansas City, Kans.: Sheed, Andrews and McMeel, 1977), p. ix.

⁶²Mark Blaug, "Second Thoughts on the Keynesian Revolution", in Mark Blaug, *Economic Theories, True or False* (Aldershot: Edward Elgar, 1990), p. 91.

The General Theory was, first and foremost, designed to explain episodes of severe and persistent unemployment, which the notion of an underemployment equilibrium does rather nicely.⁶³ It also aimed to provide (though indirectly; this was a theoretical work) the rationale for a policy response from the government. Hayek's model explained the cycle, which was one of its chief advantages over the model in the *Treatise*, but it argued against government intervention during the crisis stage. Given the human propensity to act in times of crisis, the Keynesian message was easily the more welcome one.⁶⁴

The Second World War and the subsequent history of many of the Western powers seemed to many economists to provide confirmation of the Keynesian propositions.⁶⁵ Increased public expenditure during the war, the equivalent of expansionary fiscal policy, yielded no immediate dire consequences. Indeed, after a brief round of postwar inflation, a boom began that was sustained with only mild inflationary or recessionary interruptions until the 1970s. The postwar growth experience seemed the best evidence that, in Keynes's words, "The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a quasi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom".⁶⁶ By the mid-1960s, much of the American economic community felt that the business cycle could be (and perhaps had been) vanquished, that a permanent state of quasi-boom was indeed achievable. It was not until the 1970s that the costs of the policy began to become evident, and some of Hayek's more ominous prognostications started to materialize.

⁶³In his earlier work, persistent unemployment was a disequilibrium phenomenon that was due to the existence of a 'special case'. In *The General Theory*, adjustments in income and employment bring the system back into equilibrium. But the equilibrium can be consistent with high levels of unemployment, so that the economy can get stuck (absent policy intervention) in an under-full-employment equilibrium.

⁶⁴Blaug emphasized this particular point in correspondence with the editor, noting "the obvious unpopularity of a laissez-faire theory of the business cycle in a decade characterized by the worst, longest-lasting depression of all time and the rise of fascisms in response to it—even if Hayek had had a theoretically compelling theory, a theory with do-nothing implications was doomed in a decade like the 1930s". Letter, Blaug to Caldwell, August 7, 1993. I should note that Blaug does not in his letter endorse Hayek's cycle theory; for him it is not "compelling".

⁶⁵Recent scholarship questions the article of faith that the Second World War was a confirming instance of successful demand management policy; see, for example, Robert Higgs, "Wartime Prosperity? A Reassessment of the US Economy in the 1940s", *Journal of Economic History*, March 1992, pp. 41–60.

⁶⁶Keynes, *The General Theory*, op. cit., p. 322.

The formal characteristics of Keynes's model also gave him an advantage over Hayek. Keynes presented his ideas within what economists call a 'comparative static' framework, one that conveys a sense of both determinateness and rigorous simplicity. Hayek's model, though apparently leading to determinate conclusions, was, like most cycle theories of the time, a dynamic one. It was anything but simple, and the fact that few of his English readers were familiar with the capital theory that provided its foundation did not make matters easier. Keynes's model was easily translatable mathematically; those who tried to develop Hayek's framework met with failure.⁶⁷ In the decades to come, the ability to express one's ideas in terms of a mathematical model became the sine qua non of the 'serious' economic theorist. As the formalistic revolution progressed, models like Hayek's became curious antiquities.

Though its author was no fan of econometrics, *The General Theory* nonetheless provided categories that fit in well with empirical constructs being developed by national income accountants. Hayek's general worldview was antagonistic towards such aggregative statistical work; he was bypassed by the econometrics caravan, as well.

One must not overlook Keynes's style, which drew his readers in, alternately infuriating, befuddling, and intriguing them. His very obscureness left his audience with a host of unsolved puzzles, riddles that guaranteed that his followers would have much work to do. Paul Samuelson, who may have inadvertently been infected by Keynes's style, states the attraction:

⁶⁷"Several of us made attempts at that translation; the journals of the 1930s are full of them. But what emerged, when we tried to put the Hayek theory into our own words, was not Hayek. There was some inner mystery to which we failed to penetrate". John Hicks, "The Hayek Story", op. cit., pp. 204–205. In contrast, Hicks was able to mathematize Keynes's framework almost immediately; see his "Mr. Keynes and the 'Classics': A Suggested Interpretation", *Econometrica*, vol. 5, April 1937, pp. 147–159. It was Paul Samuelson who, in the first and subsequent editions of *Economics* (New York: McGraw Hill, 1st edition, 1948) provided the famed C+I+G 'Keynesian Cross'. This was the simplification that made it possible for hordes of introductory economics students to imbibe the Keynesian spirits. Samuelson anticipated his own contribution in his 1946 obituary notice for Keynes "[P]erhaps most important from the long-run standpoint, the Keynesian analysis has begun to filter down into the elementary textbooks; and, as everybody knows, once an idea gets into these, however bad it may be, it becomes practically immortal". See his "The General Theory", reprinted in *The New Economics: Keynes's Influence on Theory and Public Policy*, ed. Seymour E. Harris (New York: Knopf, 1950), p. 147. Only recently have some principles of economics textbooks dropped the old C+I+G framework.

Herein lies the secret of *The General Theory*. It is a badly written book, poorly organized; any layman who, beguiled by the author's previous reputation, bought the book was cheated of his five shillings. It is not well suited for classroom use. It is arrogant, bad-tempered, polemical, and not overly generous in its acknowledgements. It abounds in mares' nests or confusions.... Flashes of insight and intuition intersperse tedious algebra. An awkward definition suddenly gives way to an unforgettable cadenza. When finally mastered, its analysis is found to be obvious and at the same time new. In short, it is a work of genius.⁶⁸

Perhaps to his credit, Hayek was in these areas no match for Keynes.

Finally, there was the selling of *The General Theory*. Some of the promotional work was done by Keynes himself, who prior to publication gave talks and wrote popular articles which produced a general anticipation of his book. His lectures at Cambridge from 1932 to 1935 were in effect a public forum for working out his transition to *The General Theory*. When it finally was published, the book was offered at a low price. Led by R. B. Bryce, graduate students at Harvard arranged for boxes of the book to be sent to them immediately upon publication.⁶⁹

These factors taken together do much to explain the rapid acceptance of the Keynesian paradigm by the larger profession. But our concern is with the more intimate conflict between Cambridge and London. In the end it came down to a battle for the minds of the rising generation of British-trained economists. The engagement was an intense one; Austin Robinson recalled that "discussion was conducted very much in the atmosphere of the revivalist meeting: Brother, are you saved?"⁷⁰ Keynes was assisted in his struggle by a number of others.

⁶⁸*Ibid.*, pp. 148–149.

⁶⁹On Keynes's lectures, see *Keynes's Lectures 1932–35: Notes of a Representative Student*, ed. Thomas K. Rymes (London: Macmillan, 1989). Donald Walker, "Why Keynes's *General Theory* Was a Success", *Economic Notes*, vol. 15, 1986, pp. 5–29, contains a discussion of Keynes's marketing activities.

⁷⁰Austin Robinson, "John Maynard Keynes 1883–1946", *Economic Journal*, vol. 57, March 1947, p. 41. See also Gilles Dostaler, "The Debate between Hayek and Keynes", in *Themes in Keynesian Criticism and Supplementary Modern Topics*, ed. William J. Barber (Aldershot: Edward Elgar, 1991), pp. 90–93, for an account of the immediate aftermath of the exchange.

The Contributions of Joan Robinson and Brinley Thomas

Over the summer of 1931, after Hayek's talk at Cambridge but before the publication of either *Prices and Production* or of his review of the *Treatise*, Joan Robinson wrote a paper. A revised version was eventually published two years later, and in it she strikes the pose of "a muddle-headed reader of economics" trying to make sense of the *Treatise* in light of the debate between Keynes and Hayek.⁷¹ Mrs. Robinson was thus involved from the very beginning in the contest between our two protagonists.

She was instrumental in getting students from the LSE together with members of the Circus. Meetings were held on weekends on 'neutral ground' midway between Cambridge and London. There were some beneficial results, among them the opening up of a dialogue and the founding of a new journal that was not to be tied to any particular academic institution, the *Review of Economic Studies*. But the meetings were also an effective vehicle for transmitting the latest turns in Keynes's thought. The Keynesians, of course, were at a decided advantage in these meetings. The argument was not between the Keynes of the *Treatise* versus the Hayek of *Prices and Production*; had this been the format, each side would have had an equal chance to prepare. Rather, it was Hayek's views versus a new framework, just then being developed and reported on by his disciples, a new theory that would repair all the deficiencies of the *Treatise*. It was at one of these weekend meetings that Abba Lerner saw the light and was turned from Hayekian into Keynesian.⁷²

Mrs. Robinson's toils did not end with the publication of *The General Theory*. She did the yeoman's work of publishing a popularization of Keynesian ideas in 1937. But far more important, and notorious, was her eventual role as upholder and enforcer of doctrinal purity at Cambridge. Her harassment of the shy and reserved Dennis Robertson was viewed as outrageous even by some of those who sympathized in general with her theoretical outlook.⁷³

⁷¹Joan Robinson, "A Parable on Savings and Investment", *Economica*, vol. 13, February 1933, pp. 75–84. Though she briefly criticized Hayek on forced savings, it appears that Robinson's main intent was to move Keynes away from the framework of the *Treatise*.

⁷²The episode is recounted in Joan Robinson, "Reminiscences", in *Contributions to Modern Economics*, op. cit., p. xv.

⁷³The story is told by Harry Johnson in "Cambridge in the 1950s", in Johnson and Johnson, eds, *The Shadow of Keynes: Understanding Keynes, Cambridge, and Keynesian Economics*, op. cit., pp. 127–150. The antagonism between Mrs. Robinson and Robertson apparently dated back to their earliest encounters. As even a sympathetic biographical account reveals,

The most important player outside of Cambridge was undoubtedly Brinley Thomas.⁷⁴ Thomas had spent a year in Sweden and another in Germany on a traveling fellowship and had returned to the LSE in 1935 to lecture on his experiences. The contrast he drew between the two countries was stark. Thomas reported that the Swedes agreed with Keynes on policy matters and that, furthermore, they were perfecting their own theoretical framework, one that fully justified interventionist measures. Deflationist policies in Germany, on the other hand, had abetted the emergence of Hitler and the National Socialists. Thomas's lectures and writings strongly influenced three other Hayekian sympathizers (Hicks, Nicholas Kaldor, and George Shackle) to convert to the Keynesian doctrine. Hicks's contribution of the IS-LM framework has already been mentioned. Kaldor, who had helped translate Hayek's *Monetary Theory and the Trade Cycle*, would later assist William Beveridge to provide the blueprint for a full employment policy for the British welfare state.⁷⁵ Shackle was so taken by the Keynesian vision that he tore up the thesis on capital theory that he had started under Hayek. Nearly thirty years later, he would write a history of the 1926–39 period in which Hayek's name would be mentioned but twice, and then only as the editor of a book in which an essay by Gunnar Myrdal appeared.⁷⁶ Ludwig Lachmann was later often to lament, "When I came up to the LSE in the early 1930s, everybody was a Hayekian; at the end of the decade there were only two of us: Hayek and myself".⁷⁷ Such was the completeness of the Keynesian victory in the intimate struggle between Cambridge and London.

civility is not a trait for which Joan Robinson is likely to be remembered. See Marjorie Turner, *Joan Robinson and the Americans* (Armonk, N. Y.: M. E. Sharpe, 1989).

⁷⁴Thomas's role is recounted in Nadim Shehadi, "The LSE and the Stockholm School in the 1930s", in *The Stockholm School of Economics Revisited*, ed. Lars Jonung (Cambridge: Cambridge University Press, 1991), pp. 377–389.

⁷⁵See Sir William Beveridge, *Full Employment in a Free Society* (London: G. Allen and Unwin, 1944; New York: Norton, 1945; 2nd edition, 1960). Hayek's review of Beveridge's book is reprinted in this volume, Addendum to chapter 10.

⁷⁶See G. L. S. Shackle, *The Years of High Theory: Invention and Tradition in Economic Thought, 1926–1939* (Cambridge: Cambridge University Press, 1967). In a later article, Shackle offered an incisive, and broadly sympathetic, appraisal of Hayek's contribution; see his "F. A. Hayek, 1899–", in D. P. O'Brien and John Presley, eds, *Pioneers of Modern Economics in Britain* (London: Macmillan, 1981), pp. 234–261.

⁷⁷Lachmann's reminiscence is reported on p. 366 of Stephan Boehm's obituary notice, "L. M. Lachmann (1906–1990): A Personal Tribute", *Review of Political Economy*, vol. 3, July 1991, pp. 365–371.

Sraffa's Review of *Prices and Production*

If Joan Robinson and Brinley Thomas played key roles in convincing those in the Cambridge-London axis of the truth of Keynes's ideas, it was Piero Sraffa who took on the equally important task of discrediting the Hayekian framework. His means was the standard one among academics: a review of *Prices and Production*, which is reprinted as chapter 7 of this volume.

Even more than the exchange with Keynes that preceded it, the Hayek-Sraffa duel lacks clarity. After the review had appeared, Frank Knight wrote to Oskar Morgenstern, "I wish he [Hayek] or someone would try to tell me in a plain grammatical sentence what the controversy between Sraffa and Hayek is about. I haven't been able to find anyone on this side who has the least idea."⁷⁸ Still, if one forges ahead, it is possible to discern that Sraffa had three major complaints. Let us take them up in turn.

The first was that in his book Hayek, from Sraffa's perspective, refused to address the role of money. That is, of course, a serious deficiency in a treatise whose presumptive goal is to elucidate the nature of a monetary economy. Hayek's concentration on what would occur in a moneyless world, and his definition of the natural rate as the interest rate that would prevail if money were 'neutral', seemed perverse to Sraffa.

If one gets beyond Sraffa's sarcastic tone, one can have some sympathy with his complaint. *Prices and Production* is not an easy book to read. Hayek's treatment of difficult topics is terse, particularly in the two theoretical chapters. Furthermore, though the first chapter is a history of monetary theories, money fades into the background in later chapters, where changes in the structure of production take centre stage.⁷⁹

For Hayek's approach in *Prices and Production* to be comprehensible, one must first have read his *Monetary Theory and the Trade Cycle*. There he painstakingly built up the role of money in a market system and justified the conceit of starting with a moneyless world. It also must be noted that *Monetary Theory* is by far the better-written book. Unfortunately, it

⁷⁸The letter is cited in Michael Lawlor and Bobbie Horn, "Notes on the Hayek-Sraffa Exchange", *Review of Political Economy*, vol. 4, 1992, p. 318.

⁷⁹Sraffa's own treatise, *Production of Commodities by Means of Commodities: Prelude to a Critique of Economic Theory* (Cambridge: Cambridge University Press, 1960), a paradigmatic example of concisely obscure academic writing, is apt to produce in the reader of today a reaction not unlike that caused by reading *Prices and Production* without benefit of Hayek's earlier work.

had yet to be translated when Sraffa was writing his review. In his reply, Hayek quite appropriately urged his critic to consult the forthcoming translation.

This does not mean, of course, that Sraffa would have been satisfied with what Hayek had to say in *Monetary Theory*. For what was really at issue between them here is the self-adjusting nature of the market system. Hayek assumed that the adjustment mechanism, formally described in what he called "equilibrium theory", works faultlessly in a world in which money is absent. This is precisely why he started his analysis with such a world, only later to introduce money as the disturbing factor. Sraffa questioned the initial and crucial premise of a self-adjusting system. This is the bedrock-level conflict that underlies their arcane dispute about how best to model a monetary economy.

The next problem concerned Hayek's analysis of forced savings. Recall that in the Austrian theory of the cycle the lengthening of the structure of production, begun under a regime of forced savings, never gets completed. It is always the case that rising consumer prices signal firms that their earlier decision to employ more roundabout methods was in error. Firms abandon their incomplete capital projects and thereby precipitate the crisis. But isn't it possible that the transition to more capital-intensive production methods could be completed in time? Might not the consumer goods produced by using more roundabout methods come onto line just as consumer demand begins to rise? In short, why must the traverse to a new structure of production always be interrupted before completion?⁸⁰

Hayek admitted in his reply that "it is upon the truth of this point that my theory stands or falls".⁸¹ And, sadly for Hayek, his insistence that the traverse could never be completed strikes many current commentators as being the chief deficiency of his theory of the cycle. The general consensus is that, while the scenario painted by Hayek is a possible one, he neither demonstrated its necessity nor gave adequate attention to the

⁸⁰In his review, Sraffa raised a number of different issues that connect, in one way or another, with this central point. The articles by Lachmann, "Austrian Economics under Fire: The Hayek-Sraffa Duel in Retrospect", op. cit.; Lawlor and Horn, "Notes on the Hayek-Sraffa Exchange", op. cit.; and Cottrell, "Hayek's Early Cycle Theory Re-examined", op. cit., provide more extensive treatment of the intricacies of Sraffa's attack and of Hayek's response.

⁸¹See chapter 8, p. 212, this volume.

lags implicit in the process of adjustment that he portrayed.⁸² Hayek's theory fits some, but not all, trade cycles: It is not, as Hayek purported it to be, a general theory of the cycle.

The third area of contention involves the concept of the natural rate of interest. Sraffa argued that in the sort of moneyless world that Hayek was fond of positing, "there might be at any one moment as many 'natural' rates of interest as there are commodities, though they would not be 'equilibrium' rates".⁸³ Hayek conceded that there might be as many natural interest rates as there are commodities, but insisted that all would be equilibrium rates.⁸⁴ Ludwig Lachmann later remarked sagely that this exchange demonstrates that Hayek and Sraffa were operating with two very different definitions of equilibrium.⁸⁵ In any event, Hayek's acknowledgement undermines the notion of a single natural rate that would prevail in a moneyless world. And as Sraffa noted in his rejoinder, the way was not open for Hayek to invoke some average of these natural rates (that is, one that might hold for a "composite commodity"), since Hayek had so frequently and "emphatically repudiated the use of averages".⁸⁶

We remember that Hayek spoke in early 1931 to an audience that included members of the Circus. It would have been evident to them as they were working through their critique of Keynes's *Treatise* that Hayek, like Keynes, was making use of a Wicksellian framework. It is interesting to conjecture whether this knowledge provided additional impetus to the members of the Circus to reach the conclusion that the theoretical framework of the *Treatise* was flawed and required rejection.

In any case, Sraffa's criticisms were adopted by Keynes in *The General Theory*. He cited Sraffa's review at the beginning of chapter 17 on "The Essential Properties of Interest and Money". Later in the chapter he commented on his use of the natural rate of interest in the *Treatise* as

⁸²This is the judgement rendered by, for example, Hicks, "The Hayek Story", op. cit.; Cottrell, "Hayek's Early Cycle Theory Re-examined", op. cit.; and David Laidler, "Hayek on Neutral Money and the Cycle", in *The Economics of F. A. Hayek*, Marina Colonna, Harald Hagemann, and Omar Hamouda, eds (Aldershot: Edward Elgar, forthcoming).

⁸³See this volume, chapter 7, p. 205.

⁸⁴See this volume, chapter 8, pp. 218-219.

⁸⁵Lachmann, "Austrian Economics under Fire: The Hayek-Sraffa Duel in Retrospect", op. cit., p. 237. Terming Hayek's admission "a fatal concession", Lachmann went on to "close this particular breach of the Austrian rampart" by positing an overall equilibrium of interest rates of a type not envisaged by either of the antagonists, one similar to that which might be obtained by "vigilant and efficient arbitrage" in international currency markets. See *ibid.*, p. 238.

⁸⁶Chapter 9, p. 225, this volume. Sraffa would revisit the notion of a "composite commodity" in his *Production of Commodities*, op. cit.

follows: "I am now no longer of the opinion that the concept of a 'natural' rate of interest, which previously seemed to me a most promising idea, has anything very useful or significant to contribute to our analysis".⁸⁷ Lest anyone doubt his opinion of those still foolish enough to use such a construct, and especially of those who might link it to such concepts as 'forced savings' or 'neutral money', Keynes offered the following obloquy:

But at this point we are in deep water. "The wild duck has dived down to the bottom—as deep as she can get—and bitten fast hold of the weed and tangle and all the rubbish that is down there, and it would need an extraordinarily clever dog to dive after and fish her up again".⁸⁸

The Riddle of the Review

A riddle remains: Why did Hayek fail to write a review of *The General Theory*? Keynes had sent him an advance copy. In his letter of thanks, Hayek mentioned that he was puzzled by some parts, and found other parts troubling, and concluded that "if my present doubts remain I shall probably ask for your hospitality for some notes on particular points in the E. J. [*Economic Journal*]".⁸⁹ One suspects that his doubts were not dispelled by further study. So why did he never produce a review?

Hayek suggested some answers in three of the retrospective pieces included in this volume.⁹⁰ He returned to the question often, probably because, as he put it, "I have to the present day not quite got over a feeling that I had then shirked what should have been a plain duty".⁹¹ What reasons did Hayek offer to explain his uncharacteristic shirking?

The first invokes Hayek's experience with his review of Keynes's *Treatise*. Having spent a good deal of time preparing his critique, and having felt that he had demolished Keynes's position in his review,

⁸⁷Keynes, *The General Theory*, op. cit., p. 243. The citation of Sraffa appears on p. 223.

⁸⁸*Ibid.*, p. 183.

⁸⁹Letter, Hayek to Keynes, February 2, 1936, reprinted in *The General Theory and After: A Supplement*, ed. Donald Moggridge, vol. 29 (1979) of *The Collected Writings of J. M. Keynes*, op. cit., p. 208.

⁹⁰See "The Economics of the 1930s as Seen from London", pp. 59–61, this volume; "Personal Recollections of Keynes and the Keynesian Revolution", pp. 240–241, this volume; "The Keynes Centenary: The Austrian Critique", pp. 251–252, this volume.

⁹¹"The Economics of the 1930s as Seen from London", p. 60, this volume.

Hayek was quite disappointed to receive a letter from Keynes saying that he had changed his mind and was working out a new model. Hayek wrote no review of *The General Theory* then because he assumed that by the time he had completed the task, Keynes would have changed his mind again.

On the face of it, this makes some sense. Keynes was famous, and not just among economists, for changing his mind. Indeed, mutability was part and parcel of his public persona: He was dubbed "the boneless man" in the press for his vacillation on free trade; despite his earnest (though unsuccessful) efforts on behalf of Lloyd George in the 1929 General Election, Keynes four years later released a scathing portrait of the "goat-footed bard" at Versailles in his *Essays in Biography*; and one must not forget the Thomas Jones barb about five economists with six conflicting opinions. For many observers, Keynes was more Mercury than Cassandra.⁹²

But if Keynes's inconstancy in regard to theory were Hayek's sole reason for holding back criticism, then he was guilty of a serious misjudgement. Keynes manifestly had not changed his mind about the necessity of saving capitalism from itself. And given that Keynes called his book, in his own modest way, *The General Theory*, his intent should have been clear enough. Keynes's theoretical promiscuity is not, by itself, sufficient to account for Hayek's diffidence. If anything, it could well have provided just the ammunition that was needed for an effective counterattack.

In "The Economics of the 1930s as Seen from London", Hayek linked the 'Keynes-would-change-his-mind' argument to another: his own "tiredness from controversy".⁹³ This clearly constitutes a separate reason. To be sure, Hayek had good reason to be tired by 1936: He had been the centre of other controversies, fighting with Frank Knight over capital theory and with market socialists over planning; he had been unable to

⁹²See footnote 20, this chapter, on Jones, and Johnson and Johnson, *The Shadow of Keynes*, op. cit., p. 17 on the boneless man. Keynes had originally sketched his impressions of "the Welsh witch" Lloyd George in *The Economic Consequences of the Peace*, op. cit., but he ended up excising the most offensive sections from the text. These were later reprinted in his *Essays in Biography* [1933], reprinted as vol. 10 (1972) of *The Collected Writings of J. M. Keynes*, op. cit. As always, Keynes was the most lyrical of butchers: "Lloyd George is rooted in nothing; he is void and without content; he lives and feeds on his immediate surroundings; he is an instrument and a player at the same time which plays on the company and is played on by them too; he is a prism, as I have heard him described, which collects light and distorts it and is most brilliant if the light comes from many quarters at once; a vampire and a medium in one" (*Ibid.*, p. 24).

⁹³This volume, p. 60.

forestall the defection of his own students to Keynes's camp; and the brutality of his previous exchanges with Keynes and Sraffa had doubtless left him both mentally fatigued and wary. But why did Hayek confuse his own weariness with Keynes's variability?

Hayek may have conflated the two reasons because of the dual message that Keynes had delivered in his letter announcing that he was changing his mind. Recall again the last sentence of the letter: "I am trying to re-shape and improve my central position, and *that is probably a better way to spend one's time than in controversy*" (emphasis added).⁹⁴ In 1936 Hayek, too, was re-shaping and improving his own model. He may have anticipated that once he was finished, members of the profession would again have their choice between two theories, and that this was a more appropriate, perhaps a more fruitful, and certainly (given his past experience), a less emotionally taxing way to proceed against his old nemesis.

Things did not work out that way, of course. By the time that Hayek published his next major theoretical work, *The Pure Theory of Capital*, the world was at war. Few in the profession even noticed the book. Furthermore, it was clear to Hayek that even after a prodigious effort he had not gotten very far. True enough, he had been able to clear away Böhm-Bawerk's "average period of production" and replace it with the far more complex notion of a structure of production, thereby securing the capital-theoretic foundation of Austrian theory. But he had made no further progress towards building on this new foundation a fully dynamic theory of the cycle. Hayek never returned to this task, hoping that it would be completed by others. It remains unfinished.

The third reason offered by Hayek is a straightforward methodological one. Both "The Economics of the 1930s as Seen from London" and "Personal Recollections of Keynes and the Keynesian Revolution" were written in the 1960s. In them, Hayek recounted that after the release of *The General Theory* he had a feeling, vague but enduring, that in order to do a full critique of Keynes he would need to do more than to criticize his model. Hayek disagreed with Keynes on both theory and policy. But it was Keynes's methodological approach, specifically his use of aggregates, that Hayek came to view in retrospect as being his opponent's most dangerous contribution.

Now, it is easy to understand that Hayek might put things in this way in essays written in the 1960s. Macroeconomic modelling was then at its zenith, as was hubris about the economics profession's ability to control

⁹⁴This volume, Appendix to chapter 5, letter no. 13, Keynes to Hayek, March 29, 1932.

the business cycle by applying fiscal 'fine-tuning'. What doesn't ring quite true in Hayek's claim is that he was only vaguely becoming aware of this difference over methodology in the 1930s. As we saw in our discussion of Hayek's earlier work on the United States economy, opposition to the use of statistical aggregates had long been a methodological principle among Austrians. Aggregates mask the movement of relative prices, and relative price movements are the central foci of Austrian theory.

I would like to suggest that there may indeed have been another methodological argument that Hayek was just becoming aware of in the mid-1930s. As I have argued elsewhere,⁹⁵ it was during this time that Hayek began to lose faith in the 'equilibrium theory' portrayal of the market mechanism. The equilibrium theory of Hayek's day was static, timeless, and assumed that all decision-makers have full and correct information. In the real world, forward-looking agents make decisions in real time, based on dispersed and subjectively-held (hence fallible) information. In the real world, the ultimate question is: How do the actions of such agents ever get coordinated? Equilibrium theory, with its focus on end-states in which coordination is already achieved, assumes the most important question away. Hayek eventually abandoned the equilibrium theory characterization of markets and moved to a 'market process' understanding of social coordination, one in which a pivotal informational role is assigned to freely adjusting relative prices.

If a movement away from an equilibrium story and towards a market process story characterizes the actual change in Hayek's thinking that began in the 1930s, why did he not put it in this way in his reminiscences? It was not that the new orientation undermined his policy views. The market process story, with its emphases on the dispersion and subjective aspects of human knowledge and on the essential complexity of social phenomena, supports the contention that policy-makers will seldom, if ever, have sufficient knowledge to intervene effectively in the economy. Furthermore, many interventions (in particular, those associated with central planning) have the demonstrably negative effect of impeding relative prices from performing their coordinative function. The market process story leads at a minimum to policy scepticism; and in many cases policy pessimism seems fully warranted.

The market process story does not fit in well, however, with the theory of the business cycle that Hayek had articulated in the early 1930s. In a market process world, it is possible to predict broad patterns of outcomes, it is possible to make what Hayek later would call 'pattern

⁹⁵Caldwell, "Hayek's Transformation", op. cit.

predictions'. One can, for example, predict that price ceilings will result in shortages, queues, black markets, deterioration in product quality, and the like. But unless one resorts to an equilibrium theory world, it is not possible accurately to predict a precise sequence of changes in relative prices of the sort found on the pages of *Prices and Production*.⁹⁶

There is a final reason, albeit one that is not emphasized by Hayek, that may have been a factor in his decision not to write a review of *The General Theory*. In 1931, Keynes could legitimately have been viewed as 'the enemy' by Hayek and his friends at the LSE. As the decade unfolded, however, the situation gradually altered. The rise of fascism brought about changes in the climate of opinion among the intelligentsia in Britain and in the other surviving Western democracies. Even those who might appear only to be seeking a 'middle way' still favoured substantial amounts of state planning.⁹⁷ Hayek's debates with the market socialists, as well as the rise in influence of even more radical groups, made it clear that his opponents were not monolithic. Though Hayek clearly had his differences with Keynes, the latter had not, at least, wholly forsaken his Liberal origins.⁹⁸ Anything that might weaken his influence could potentially strengthen the hand of the planners or other more radical groups. Given the climate, Hayek decided to mute his

⁹⁶Hayek seems to recognize this in his discussion of *The Pure Theory of Capital* in *Hayek on Hayek*, op. cit. He notes that after he jettisoned Böhm-Bawerk's average period of production, "the thing becomes so damned complicated it's almost impossible to follow it". He goes on to say that: "Like so many things, I am afraid, which I have attempted in economics, this capital-theory work shows more a barrier to how far we can get in efficient explanation than sets forth precise explanations. All these things I've stressed—the complexity of the phenomena in general, the unknown character of the data, and so on—really much more points out limits to our possible knowledge than our contributions that make specific predictions possible". *Ibid.*, pp. 159-160.

⁹⁷The title of Arthur Marwick's study of the period in Britain captures the mood nicely: "Middle Opinion in the Thirties: Planning, Progress and Political 'Agreement'", *English Historical Review*, April 1964, pp. 285-298. Radical thought was not limited to England. Describing the University of Chicago during the mid-1930s, Milton Friedman recalls that: "[C]lose to a majority of the social scientists and the students in the social sciences were either members of the Communist Party or very close to it...It was an environment that was strongly prosocialist. It was strongly in favour of government going all the way to take over the whole economy." In Edmund Kitch, ed., "The Fire of Truth: A Remembrance of Law and Economics at Chicago, 1932-1970", *Journal of Law and Economics*, vol. 26, April 1983, pp. 178-179.

⁹⁸Indeed, recent scholarship suggests that, as the 1930s progressed, Keynes may have begun to lose some of his enthusiasm for activist fiscal policy. See Bradley Bateman, "In the Realm of Concept and Circumstance", *History of Political Economy*, vol. 26, Spring 1994, pp. 99-116.

criticisms of Keynes.

In any event, relations between Keynes and Hayek appear to have been quite good during the war. When London evacuated, Keynes arranged to get Hayek rooms at Cambridge. Keynes spent his weekends there, and they often met on social occasions. Apparently economics was rarely discussed.

Keynes's 1940 pamphlet, "How to Pay for the War", was also clearly important in mending any broken fences.⁹⁹ The wartime economy had brought some economic benefits: There was full employment, and hence an increase in incomes. But the war also brought with it reduced production of consumer goods. With increased purchasing power chasing a reduced number of goods, the question arose: How should existing goods be allocated? Keynes's plan called for a tax increase, the encouragement of savings, and (its most novel idea) a deferred payment scheme that would delay the receipt of a percentage of all incomes until after the war.

Keynes's plan was significant because it established his opposition to the two other likely alternatives, both of which Hayek had also rejected. One of these was to simply permit inflation to take its course, that is, to allow the prices of consumer goods to rise. The other was the standard combination of price-fixing with rationing. (Keynes's plan allowed this only for certain household staples.) "How to Pay for the War" revealed to Hayek that Keynes was no inflationist, and further that he appeared to recognize the allocative and coordinative role of relative prices.

Keynes's reaction to *The Road to Serfdom*, published in 1944, must also be mentioned. Keynes read the book on one of his crossings to America, and later sent Hayek a letter expressing qualified agreement with many of the themes of the book. In his opening paragraph, Keynes bordered on the effusive:

The voyage has given me the chance to read your book properly. In my opinion it is a grand book. We all have the greatest reason to be grateful to you for saying so well what needs so much to be said. You will not expect me to accept quite all the economic dicta in it. But morally and philosophically I find myself in agreement with virtually the

⁹⁹Keynes, "How to Pay for the War", reprinted in *Essays in Persuasion*, op. cit., pp. 367-439. The pamphlet first appeared as two long articles published in *The Times* in November, 1939.

whole of it; and not only in agreement with it, but in a deeply moved agreement.¹⁰⁰

This made a dramatic contrast to the reception offered by the academic community, particularly in the United States, where Hayek's views were excoriated.

No, the problem was not with Keynes. By war's end, the real danger was his followers, those who sought to use his name to pursue their own agendas. This explains the content of the last conversation between Keynes and Hayek. By 1946, Hayek was trying hard to get Keynes to speak out against people like Joan Robinson and Richard Kahn. His death a few months later led to Keynes's canonization. His Cambridge followers moved quickly to claim his mantle. Theirs was the most extreme version of 'Keynesian' thought, its influence restricted mostly to England. A milder version, propagated in the United States by men like Alvin Hansen and Paul Samuelson, became for nearly thirty years the dominant paradigm in economics.

Hayek's stay in England ended sadly. Politically, all that he had fought against was coming to pass. Economics at Cambridge was slowly but surely being taken over by the young Keynesians. In 1946, his close friend Robbins would deliver the Marshall lectures there and repudiate his own earlier beliefs on the cycle.¹⁰¹ Though there were also personal reasons involved in his decision to move, Hayek four years later took a position on the Committee for Social Thought at the University of Chicago. Though he would always consider England as his cultural home, the place where he felt the most comfortable, Hayek would never spend any significant time there again.

"Which Was Right, Keynes or Hayek?"

We have avoided the key question until now: Which was right, Keynes or Hayek? It is a question on which honest disagreement exists, and one that may be posed on a number of different levels.

Regarding their respective theories, my own opinion, as is perhaps evident in the preceding text, is that neither was right. Both purported to be supplying a general theory of the cycle, and in this neither was successful. Both were able to provide theories that had specific applica-

¹⁰⁰Letter, Keynes to Hayek, June 28, 1944, reprinted in *Activities 1940-1946: Shaping the Post-War World: Employment and Commodities*, ed. Donald Moggridge, vol. 27 (1980) of *The Collected Writings of J. M. Keynes*, op. cit., p. 385.

¹⁰¹Lionel Robbins, *The Economic Problem in Peace and War* (London: Macmillan, 1947), pp. 67-68.

tions to particular times and places, which is no small feat. Their sin, if there was one, was to generalize on the basis of limited experience. This is a temptation that social scientists, and perhaps economists in particular, have repeatedly found it near impossible to resist.

To judge who was right on matters of policy is even more complicated, since the economic profession's experience in this area is both country-specific and still relatively limited. With this caveat in mind, one might cautiously argue that both Keynes and Hayek provided some wisdom regarding policy. Keynes was right to argue against the return to gold in the environment of the early 1920s. He was also among many at the time to recognize that worker resistance to reductions in nominal wages in countries with strong labour movements make persistent high unemployment in such regimes more likely. Recent experience in the European Community suggests that structural unemployment of this sort is intransigent in the face of policy countermeasures.¹⁰² Hayek appears to have been right in arguing that, though the severity of cyclical swings can be moderated by policy, sustained efforts to maintain full employment will eventually cause inflation to worsen. The economic history of the United States since the end of the Second World War seems to support his prediction. The swings of the business cycle appear to have been less severe than in earlier times,¹⁰³ but this has been accompanied by higher average levels of inflation, with the stagflation of the 1970s being the clearest confirming instance of his general policy pessimism.

Hayek and Keynes differed sharply on what they thought could be done in the world. There were numerous dimensions to their disagreement. Keynes was a progressive, an optimist, and not least of all, an aesthete. He despised the Victorian taste for narrow limits on proper behaviour. In the frightening new world that was emerging after the Great War, he feared that a blind adherence to outmoded tradition would only serve to hasten the victory of totalitarian regimes. These he detested, partly for their crass emphasis on the material world, but also on aesthetic grounds. There could be little room in such a world for the individual variation that made life rich, vibrant, worth living. His confidence in the new and in the powers of humankind to shape its environment show that he shared in the progressive illusions of his

¹⁰²See Charles Bean, "European Unemployment: A Survey", *Journal of Economic Literature*, vol. 32, June 1994, pp. 573-619.

¹⁰³Some recent research disputes even this modest claim about the comparative volatility of the cycle. See Christina Romer, "Is the Stabilization of the Postwar Economy a Figment of the Data?", *American Economic Review*, vol. 76, June 1986, pp. 314-344.

times. In this respect, Keynes, unique in many of his views, was very much a representative character of his day.

In contrast, Hayek's worldview was dark, sobering, sober. His regard for savings bordered on the puritanical. A profound epistemological pessimism led him to a kind of stoicism regarding policy: Because our knowledge is dispersed, particular, and limited, our ability to enact effective public policy is severely circumscribed. In Hayek's opinion, understanding the extent of our own limitations was often the best way to avoid error, and avoiding error was often the loftiest goal to which it was reasonable to aspire. None of this accommodated the progressive and scientific presumptions of his day, in England or elsewhere. Hayek never quite fit; he was viewed as a curious kind of conservative, sincere and honest but a bit quaint. Three generations of policy experience later, it might now be the optimism of the progressives that seems quaint. Would it not be a sweet irony if, in the end, Hayek turned out to be the real Cassandra?

John Maynard Keynes and Friedrich Hayek differed profoundly in their responses to the interwar world that they inhabited. Both observed a world gone mad. Keynes saw salvation in a thorough revision of the liberal order. Hayek saw it in the rediscovery of one. Their debate over this question continues to this day; it is perhaps the most important issue that democratic regimes, old or new, must address.

Bruce Caldwell

HAYEK COMES TO THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE
