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Working Paper No. 974

The General Theory as "Depression Economics"? Financial Instability and Crises in Keynes's Monetary Thought

by

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ABSTRACT

This paper revisits Keynes's writings from *Indian Currency and Finance* (1913) to *The General*

Theory (1936) with a focus on financial instability. The analysis reveals Keynes's astute

concerns about the stability/fragility of the banking system, especially under deflationary

conditions. Keynes's writings during the Great Depression uncover insights into how the Great

Depression may have informed his *General Theory*. Exploring the connection between the

experience of the Great Depression and the theoretical framework Keynes presents in *The*

General Theory, the assumption of a constant money stock featuring in that work is central. The

analysis underscores the case that *The General Theory* is not a special case of the (neo-)classical

theory that is relevant only to "depression economics"—refuting the interpretation offered by J.

R. Hicks (1937) in his seminal paper "Mr. Keynes and the Classics: A Suggested Interpretation."

As a scholar of the Great Depression and Federal Reserve chairman at the time of the modern

crisis, Ben Bernanke provides an important intellectual bridge between the historical crisis of the

1930s and the modern crisis of 2007–9. The paper concludes that, while policy practice has

changed, the "classical" theory Keynes attacked in 1936 remains hegemonic today. The common

(mis-)interpretation of *The General Theory* as depression economics continues to describe the

mainstream's failure to engage in relevant monetary economics.

KEYWORDS: John Maynard Keynes; Great Depression; Financial Crises; Central Banks;

Interest Rates; Monetary Theory

JEL CLASSIFICATIONS: B2; B3; E44; E58; E65; G01

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1. INTRODUCTION

Following the Rome conference¹ theme, "Financial instability, market disruptions and macroeconomics: lessons from economic history and the history of economic thought," I will attempt to shed light on these issues by revisiting Keynes's writings from *Indian Currency and Finance* (1913) to *The General Theory* (1936). The analysis reveals Keynes's astute concerns about the stability/fragility of the banking system, especially under deflationary conditions. A special focus will be on Keynes's writings during the Great Depression, which underscore the case that *The General Theory* is NOT a special case of the (neo-)classical theory that is relevant only to "depression economics."

Ever since J. R. Hicks (1937) seminal paper "Mr. Keynes and the Classics: A suggested interpretation," it has been the standard interpretation that Keynes's *General Theory* was really only a "special theory," dealing with the exceptional case of depression economics. Despite Keynes's frontal attack, neoclassical theory has been upheld as valid and more general until today. How did Keynes see the unfolding Great Depression and how did his contemporary appraisal of events shape his *General Theory*?

The analysis proceeds as follows. Section 2 investigates Keynes's early monetary work, *Indian Currency and Finance*, which shows Keynes's keen concerns for financial instabilities and his appreciation of the important role of central banks as lender of last resort. Section 3 revisits Keynes's internationally influential attack on the Versailles Treaty, *The Economic Consequences of the Peace*, in which Keynes analyzes the challenges posed by debt overhangs in the aftermath of World War I and the deflationary strategy for their resolution that is the core of the infamous "peace" treaty. Section 4 examines Keynes's *Tract on Monetary Reform* and *Treatise on Money*. The background to the former work is the price level instability experienced in Britain and elsewhere in the aftermath of WWI. The background to the latter work is Britain's stagnation in the second half of the 1920s following the country's return to gold at sterling's prewar parity. Britain's specific struggles with its chosen internal devaluation in the context of a lively world

¹ The Fifth Thomas Guggenheim Conference in the History of Economic Thought was held in Rome, Italy, at the Accademia Nazionale Dei Lincei on December 17–18, 2019.

economy in the second half of the 1920s was very different from the world-wide deflationary environment of the Great Depression that formed the background to *The General Theory*.

Section 5 takes a close look at Keynes's assessments and writings during the Great Depression, with a twofold interest. One objective is to gain insight into how the Great Depression may have informed Keynes's *General Theory* specifically. The other, broader objective is to explore whether Keynes's contemporary observations regarding the Great Depression may offer additional insights regarding financial and monetary instabilities as reoccurred globally in 2007–9, for instance. Section 6 then further explores the connection between the experience of the Great Depression and the theoretical framework Keynes presents in *The General Theory*. The assumption of a constant money stock is the focal point here. Section 7 offers a brief history of *The General Theory's* reception as "depression economics" and the short-lived revival of interest in Keynes's "general theory" during the global financial crisis of 2007–9. Starkly different macro policy responses to the two calamities surely stand out.

As a scholar of the Great Depression and Federal Reserve chairman at the time of the modern crisis, Ben Bernanke provides an important intellectual bridge between the historical crisis of the 1930s and the modern crisis of 2007–9. Importantly, while policy practice has changed, the "classical" theory Keynes attacked in 1936 remains hegemonic today. An interesting challenge was launched recently from an unexpected source, the Bank for International Settlement (BIS). Section 8 concludes that the common (mis-)interpretation of *The General Theory* as depression economics continues to describe the mainstream's failure to engage in relevant monetary economics.

2. EARLY CONCERNS REGARDING BANKING INSTABILITIES

Between 1906 and 1908, Keynes worked at the India Office in London. The familiarity with Indian affairs led to his first major work in monetary economics, titled *Indian Currency and Finance* and published in 1913. The work concerns both India's currency and exchange rate arrangements and its financial structure. Keynes describes India's banking system as a dual one,

featuring both Western-style banks as well as "native" financial institutions (Shroffs, Marwaris, and other private bankers and moneylenders), with both strands of the system operating in parallel and without full arbitrage of financial conditions between them. While Keynes assesses India's exchange rate arrangements, with its gold exchange standard linked to sterling and the City of London, as suitable and progressive, he identifies various vulnerabilities of its evolving banking system compared to the situation in Britain and elsewhere.

According to Keynes, the contemporary banking situation in England had developed into a stable "checking currency" system in which checks facilitated payments and gold did not circulate but only served as a reserve for external purposes. Bank runs had become infrequent as depositors' confidence in the system had grown sufficiently, while the Bank of England had perfected its toolset for managing sterling's gold anchor: "The essential characteristics of the British monetary system are, therefore, the use of cheques as the principal medium of exchange, and the use of bank rate for regulating the balance of immediate foreign indebtedness (and hence the flow, by import and export, of gold)" (Keynes 1913, 13).

While chiefly satisfied with its gold exchange standard, Keynes was concerned about the stability of India's banking system and the availability of finance for facilitating the country's development, especially regarding internal financing arrangements.

Externally the situation was characterized by a good measure of stability at the time, in principle. Nevertheless, Keynes was worried that stability might breed instability (the Minskyan theme) and that short-term foreign indebtedness was inherently risky. He observes that: "the business of financing Indian trade, so far as it is carried out by banks with their seat in London, is in the hands of a very small number of banks. They stand, broadly speaking, in an exceedingly strong financial position supported by large reserve funds. In this matter India is now enjoying the fruit of past disasters and of conditions in which the struggle for existence was too keen to allow any but the fittest to survive. If the present spell of prosperity lasts too long, she will no doubt lose it" (Keynes 1913, 147). Keynes adds that: "There is, prima facie, some danger to the stability of the Indian financial system in the fact that its money market is largely financed by funds raised, not permanently but for short periods, in a far-distant foreign center" (Keynes 1913, p. 149–50).

Internal financing arrangements were far more fragile in Keynes's view. The Indian rupee traditionally circulated in the form of silver coins. The note issue in circulation had grown significantly but remained wholly disassociated from banking. As a result, India's currency was internally "absolutely inelastic" (Keynes 1913, 40), which was a serious problem since the demand for currency was strongly seasonal.

Banking deposits, too, had grown very strongly in recent times, but not so banks' cash reserves. Paid-up bank capital ratios had also sharply declined. Keynes (1913, 53) saw this as a serious source of fragility in view of India's history of confidence crises, bank runs, and deep-seated hoarding habits (featuring the "barren accumulation of gold").

Keynes discusses the role of banking regulation (minimum capital and liquidity requirements and lending restrictions) and identifies the sharp deposit expansion of native moneylenders, with their "hopelessly inadequate" cash reserves, as particularly dangerous: "it is hard to doubt that in the next bad times they will go down like ninepins. If such a catastrophe occurs, the damage inflicted on India will be far greater than the direct loss falling on the depositors. The growth of banking habits in India is, of course, of the utmost importance to the country's economic development. A startling series of failures will do much to retard it" (Keynes 1913, 159).

The ultimate problem was that India was lacking a central bank. While the government was de facto fulfilling some central banking functions, Keynes considered this feature as the key source of weakness and potential instability:

At the present time the arguments in favor of a state [central] bank for India are very strong ... The government have taken over so many of the functions of a central bank that they cannot wisely neglect the rest. A note issue of growing importance, the management of the government's cash balances, the regulation of the foreign exchanges – all these are controlled together and treated as a whole in a compact and admirably conceived scheme. But other benefits cannot be obtained easily, so long as these functions are utterly divorced from those of banking proper. (Keynes 1913, 166)

The absence of a proper central bank meant that India was lacking an effective lender of last resort in case of banking crises. Keynes states that he: "would emphatically apply to India the well-known doctrine which the powerful advocacy of Mr. Bagehot raised in England many years

ago to an impregnable position in the unwritten constitution of this country—the doctrine, namely, that in a time of panic the reserves of the Bank of England must, at a suitably high rate, be placed at the disposal of the public without stint and without delay" (Keynes 1913, 115).

When *Indian Currency and Finance* was already in proof, Keynes was appointed to the Royal Commission on Indian Finance and Currency that was set up in May 1913. Aged 30, Keynes came to play a prominent role on that commission, both in taking evidence from witnesses and in the drafting of the commission's report. Since the issue of establishing a central bank in India was not meant to be made a central question of the commission's inquiry, the subject was only addressed in an annex—which was largely due to Keynes and which, unsurprisingly, came down in favor of establishing an Indian central bank. This was not the last occasion on which India featured in Keynes's theorizing and policy advising on world economic affairs.

In 1926, Keynes was a witness when another Royal Commission on India was investigating the currency situation in view of Britain's return to gold in 1925. Keynes advised sticking with the existing gold exchange standard and not introducing a gold currency in India.

When Britain came off gold for good in September 1931, India and the remainder of the British empire (except for South Africa) stayed aligned with sterling rather than gold on that occasion; Marcello De Cecco (1974) highlights India's critical role within the empire of earning a dollar surplus. "Sterling balances," short-term debts accumulated by Britain largely during World War II within the empire, became a major challenge in the Anglo-American negotiations concerning the postwar settlement and involving Keynes—when America insisted on abolishing trade preferences and restoring sterling convertibility (too) early, which ushered in the Sterling Crisis of 1947.

For by the time of Keynes's death in 1946, Britain was no longer in the favorable creditor position Keynes had emphasized in 1913, identifying an asymmetry in creditor-debtor relations that became central in his thinking about international relations: "The position of a country which is preponderantly a creditor in the international short-loan market is quite different from that of a country which is preponderantly a debtor. In the former case, which is that of Great

Britain, it is a question of reducing the amount lent; in the latter case it is a question of increasing the amount borrowed" (Keynes 1913, 13).

3. EARLY CONCERNS REGARDING CREDITOR-DEBTOR STATE RELATIONSHIPS

Germany provided another recurrent theme in Keynes's theorizing and policy advising on world affairs, starting with *The Economic Consequences of the Peace*, published in 1919. Central to Keynes's critique of the Treaty of Versailles were excessive debt obligations, government debt obligations arising from the war, and imposed war reparations.

Keynes begins the work that promptly catapulted him to world fame with describing the high degree of economic integration that the world and specifically Europe had reached prior to WWI (also known as the era of globalization, mark 1). He argues that the victors should practice magnanimity and solidarity rather than vengeance. Reviving prosperity in war-ridden Europe—rather than deliberately starving and disintegrating the continent—should feature Germany as an integral part: "I see no possible means of repairing this loss of productivity within any reasonable period of time except through the agency of German enterprise and organization... [so] let us encourage and assist Germany to take up again her place in Europe as a creator and organizer of wealth for her eastern and southern neighbors" (Keynes 1919, 186–87). It was going to take another world war to finally see world leaders approach the matter in the spirit proposed by Keynes in 1919 in the aftermath of WWII.

Instead, the Treaty of Versailles imposed on Germany an external debt that exceeded the indemnity France paid to Germany in 1871 by a factor of 13. The treaty meant that Germany lost significant parts of its territory and population, as well as its merchandise fleet, colonies, and other foreign assets. Yet it was obliged to deliver trade surpluses for decades to come while facing new trade restrictions. Germany would have needed to go through a massive internal devaluation to deliver the goods and pay off the debts.

But colossal adjustment would not befall Germany alone. The recipient countries of German transfers would need to adjust, too, to enable Germany to run huge and persistent trade surpluses. Their demonstrated unwillingness to do so underlined that Versailles provided the script for general deflation, which would hardly make the overshadowing debt problem go away—but quite the opposite.

But the deeper underlying problem was that it was not only Germany that was made to owe huge debts to its victors. Rather, Keynes observes in the final chapter of the book:

The existence of the great war debts is a menace to financial stability everywhere. There is no European country in which repudiation may not soon become an important political issue. In the case of internal debt, however, there are interested parties on both sides, and the question is one of the internal distribution of wealth. With external debts this is not so, and the creditor nations may soon find their interest inconveniently bound up with the maintenance of a particular type of government or economic organization in the debtor countries. Entangling alliances or entangling leagues are nothing to the entanglements of cash owing. ... The war has ended with everyone owing everyone else immense sums of money. Germany owes a large sum to the Allies; the Allies owe a large sum to Great Britain; and Great Britain owes a large sum to the United States. The holders of war loan in every country are owed a large sum by the state; and the state in its turn is owed a large sum by these and other taxpayers. The whole position is in the highest degree artificial, misleading, and vexatious. We shall never be able to move again, unless we can free our limbs from these paper shackles. A general bonfire is so great a necessity that unless we can make of it an orderly and goodtempered affair in which no serious injustice is done to anyone, it will, when it comes at last, grow into a conflagration that may destroy much else as well. As regards internal debt, I am one of those who believe that a capital levy for the extinction of debt is an absolute prerequisite of sound finance in every one of the European belligerent countries. But the continuance on a huge scale of indebtedness between governments has special dangers of its own. (Keynes 1919, 177–78)

Indeed. The general (debt) deflation implanted in the Treaty of Versailles was temporarily avoided by two factors. For one thing, the Wall Street lending machine not only fired up asset prices in America but enabled a boom even in Germany in the second half of the 1920s²—until a sudden stop/reversal in capital flows turned boom into bust and saw Germany achieve trade surpluses when Chancellor Heinrich Brüning³ finally imposed on Germany the deflation provided for at Versailles ten years earlier. For another, Germany's reparation obligations were

² "The United States lends money to Germany, Germany transfers its equivalent to the Allies, the Allies pay it back to the U.S. government. Nothing really passes—no one is a penny the worse" (Keynes 1926a).

³ Keynes visited Germany in early 1932, during which he had a personal meeting with Brüning; see below.

subsequently reduced in several renegotiations until they finally ended altogether in 1932—when the Great Depression was ravaging.

Hitler ended the Great Depression in Germany by what postwar German ordoliberals describe as "Keynesian" policies. It became part of the German post-war ordoliberal narrative that Keynesianism prepared the ground for collectivism and central planning. Germany is famous today for its peculiar anti-Keynesianism. Whatever blame Keynes may or may not deserve for his influence in Germany, it seems fair to say that German ordoliberal thought is anti-macroeconomics (Bibow 2018).

4. INTERNAL EQUILIBRIUM IN THEORY AND BRITISH PRACTICE: FROM THE *TRACT* TO THE *TREATISE*

Keynes's second major monetary work, *A Tract on Monetary Reform*, was published in 1923. It analyzes the violent disturbances to the price level that occurred in Britain and other countries during WWI and its aftermath. Keynes's key policy advice is that monetary policy should primarily aim at maintaining internal equilibrium rather than be tied to some external commitment such as the gold standard. Acknowledging important changes in global balance and power, Keynes argues that the latter would mean having British monetary policy largely determined by the US Federal Reserve Board. Instead, the Bank of England should apply its monetary policy foremost to stabilizing the credit cycle and price level. In addition, some degree of exchange rate stability would still be attainable through central bank cooperation, Keynes argues.

Of greatest relevance in view of the conference theme is the first chapter of the book in which Keynes investigates the consequences of inflation and deflation on the distribution of wealth and income and economic activity. Keynes argues that the economic organization of modern societies is based on money contracts and presupposes for its proper and fair functioning that the value of money is held fairly stable.

Historically, price stability has not been the norm though. Even the 19th century gold standard era saw periods of significant inflation and deflation. But the experience of relative stability over the period as a whole may have encouraged the illusion of its permanence. Considering long periods, the experience has been one of inflation and progressive deterioration in the value of money, Keynes observes:

there is no historical warrant for expecting money to be represented even by a constant quantity of a particular metal, far less by a constant purchasing power. Yet money is simply that which the State declares from time to time to be a good legal discharge of money contracts. In 1914 gold had not been the English standard for a century or the sole standard of any other country for half a century. There is no record of a prolonged war or a great social upheaval which has not been accompanied by a change in the legal tender, but an almost unbroken chronicle in every country which has a history, back to the earliest dawn of economic record, of a progressive deterioration in the real value of the successive legal tenders which have represented money. Moreover, this progressive deterioration in the value of money through history is not an accident, and has had behind it two great driving forces—the impecuniosity of governments and the superior political influence of the debtor class. (Keynes 1923, 8–9)

What has changed under the "phase of capitalism, as developed during the nineteenth century, [is that] many arrangements were devised for separating the management of property from its ownership" and the emergence of an elaborate "investment system" [read: financial system] based on money contracts and featuring the "payment of fixed sums of money over a long period of time" (Keynes 1923, 4).

Keynes divides society into three classes: the "investing class" [read: wealth owners], the business class, and the [wage] earner. Concerning the distribution impact Keynes concludes that:

inflation redistributes wealth in a manner very injurious to the investor, very beneficial to the business man, and probably, in modern industrial conditions, beneficial on the whole to the earner. Its most striking consequence is its *injustice* to those who in good faith have committed their savings to titles to money rather than to things. But injustice on such a scale has further consequences. The above discussion suggests that the diminution in the production of wealth which has taken place in Europe since the war has been, to a certain extent, at the expense, not of the consumption of any class, but of the accumulation of capital. Moreover, inflation has not only diminished the capacity of the investing class to save but has destroyed the atmosphere of confidence which is a condition of the willingness to save. Yet a growing population requires, for the maintenance of the same standard of life, a proportionate growth of capital. (Keynes 1923, 29)

His analysis then elaborates further on the diminution of the production of wealth that inflations and deflations are likely to cause, distinguishing price level changes, expectations of price level changes, and the degree of confidence in which such expectations are held. Keynes concludes that:

rising prices and falling prices each have their characteristic disadvantage. The inflation which causes the former means injustice to individuals and to classes, particularly to investors; and is therefore unfavorable to saving. The deflation which causes falling prices means impoverishment to labor and to enterprise by leading entrepreneurs to restrict production, in their endeavor to avoid loss to themselves; and is therefore disastrous to employment. The counterparts are, of course, also true-namely that deflation means injustice to borrowers, and that inflation leads to the overstimulation of industrial activity. But these results are not so marked as those emphasized above, because borrowers are in a better position to protect themselves from the worst effects of deflation than lenders are to protect themselves from those of inflation, and because labor is in a better position to protect itself from over-exertion in good times than under-employment in bad times. Thus inflation is unjust and deflation is inexpedient. 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*. But it is not necessary that we should weigh one evil against the other. It is easier to agree that both are evils to be shunned. The individualistic capitalism of today, precisely because it entrusts saving to the individual investor and production to the individual employer, presumes a stable measuring-rod of value, and cannot be efficient—perhaps cannot survive without one. (Keynes 1923, 35–36)

What is surprising in Keynes's analysis is that, while he highlighted the importance of the existence of the financial system, he does not consider any impacts of price level changes on financial institutions but focuses on wealth owners and debtors only. Supposedly borrowers protect themselves from deflation through default, possible repercussions of which Keynes fails to discuss here except for the generally depressing effect of deflation on economic activity and employment as such, which will likely feature defaults on debts as well.

Chapter 2 of the *Tract* discusses the role of countries' fiscal position on monetary and price level developments. Keynes favors a capital levy over European governments' chosen recourse to seigniorage and the inflation tax in battling the public debt overhangs left by WWI.

Chapter 3 provides the theoretical foundations for his monetary policy advice offered in subsequent chapters, namely to stabilize the internal price level rather than the exchange rate,

and to stabilize the price level not merely over long periods but also avoid cyclical fluctuations in "business, prices, and employment" (Keynes 1923, 138).

Keynes applies the Cambridge quantity theory of money in devising a strategy for the central bank to aim at internal equilibrium. Keynes attributes the "credit cycle" to the public's varying demand for cash holdings (both currency and bank deposits). The central bank should try to dampen the cyclicality in the public's demand for cash holdings and offset any remaining variation by adjusting the liquidity in the system and/or the banks' cash ratio. Controlling banks' credit creation is a central part of the monetary policy strategy so conceived, as Keynes explains that:

The system actually in operation to-day is broadly as follows: ... The internal price level is mainly determined by the amount of credit created by the banks, chiefly the Big Five; though in a depression, when the public are increasing their real balances, a greater amount of credit has to be created to support a given price level (in accordance with the [Cambridge quantity theory of money]) than is required in a boom, when real balance are being diminished. The amount of credit, so created, is in its turn roughly measured by the volume of the banks' deposits—since variations in this total must correspond to variations in the total of their investments, bill-holdings, and advances. (Keynes 1923, p. 141–42)

Adjusting "bank rate," (i.e. the key short-term interest rate) may not be sufficient on its own. The central bank must also be ready to adjust the liquidity in the system by varying its own investments. He advises the central bank coordinates with the treasury, since short-term government debts are close substitutes for central bank deposits.

Keynes's analysis of the operational side of monetary policy remains rudimentary and financial stability concerns are not part of his investigation in the *Tract* either. He also readily concedes that: "As regards the criteria, other than the actual trend of prices, which should determine the action of the controlling authority, it is beyond the scope of this volume to deal adequately with the diagnosis and analysis of the credit cycle. The more deeply that our researches penetrate into this subject, the more accurately shall we understand the right time and method for controlling credit expansion by bank rate or otherwise" (Keynes 1923, 148).

This statement describes the agenda Keynes set himself for his third major work in monetary economics, *A Treatise on Money*, published on October 31, 1930. Against Keynes's advice in the *Tract*, Britain was going to return to gold at the prewar parity in 1925, only to depart from gold again in 1931. The widespread nostalgia for gold was based on illusions, as Keynes explained in the *Tract*: "most important of all—in the modern world of paper currency and bank credit there is no escape from a 'managed' currency, whether we wish it or not; convertibility into gold will not alter the fact that the value of gold itself depends on the policy of the central banks" (Keynes 1923, 136).

Keynes's research related to the *Treatise* took him six years, during which his ideas and insights kept on evolving. In the final phase of writing the *Treatise*, Keynes also played a very active role on the Macmillan Committee ("Committee on Finance and Industry")—while the world was experiencing the onset and early stages of the Great Depression.

His article "The Economic Consequences of Mr. Churchill," published in 1925 in response to Britain's return to gold at the prewar parity, provides an important link between the *Tract* and the *Treatise* and it captures the main event that was shaping Britain's economic performance during that time. Returning to gold at the prewar parity meant leaving traded-goods industries uncompetitive. Restoring equilibrium would involve deflation and unemployment. As Britain's trade balance turns against it:

The Bank of England is compelled to curtail credit by all the rules of the gold standard game. It is acting conscientiously and "soundly" in doing so. But this does not alter the fact that to keep a tight hold on credit—and no one will deny that the Bank is doing that—necessarily involves intensifying unemployment in the present circumstances of this country. What we need to restore prosperity today is an easy credit policy. We want to encourage business men to enter on new enterprises, not, as we are doing, discourage them. Deflation does not reduce wages "automatically." It reduces them by causing unemployment. (Keynes 1925, 259)

Keynes had diagnosed inflations and deflations as economically and socially harmful in the *Tract*. That some prices adjust faster than others and that economies may get stuck in disequilibrium for longer periods of time were the central themes of the *Treatise*. Deflation as a

cumulative process, featuring stagnation and protracted unemployment, was the peculiar British experience at the time.

But "The Economic Consequences of Mr. Churchill" also features an argument that was to become a central theoretical issue in *The General Theory*: while an economy-wide reduction in money wages would do the trick in theory, it is hard to be done, if not impossible, in practice. In Britain of the 1920s, it was about realigning British wages and prices with international ones given an overvalued exchange rate. In *Treatise* theory terms, as in neoclassical mainstream thought at the time and today, "sticky" wages are an obstacle to restoring equilibrium; wage stickiness can cause unemployment in this view. By contrast, in *The General Theory*, a general wage deflation is no longer seen as guaranteeing any return to equilibrium but may end up deepening the disequilibrium instead. The background and experience of the 1930s was a different one: it was no longer merely Britain's need to deflate in order to restore equilibrium (internal devaluation) that was the issue, now it was deflation all round—leading to deeper deflation and depression all round.

But I will first need to explore the theoretical framework of the *Treatise on Money* somewhat further here because the *Treatise* provided the theoretical lens through which Keynes viewed the early stages of the Great Depression.

Keynes's two-volume work on monetary economics, titled *A Treatise on Money*, is mainly an investigation into the causes of, and ways to control, the business cycle (or credit cycle). Echoing his frustration as expressed in his earlier *Tract* about the limited practical usefulness of the quantity theory of money, Keynes sets out to devise a dynamic theoretical framework suitable for analyzing states of transition and disequilibrium. His so-called "fundamental equations," featuring distinct concepts of investment and saving, provide the core of his theoretical apparatus. The key idea is that disequilibria between investment and saving (resembling disequilibria between spending in the economy or business receipts on the one hand, and business costs on the other) are the drivers of "profit inflation/deflations" which, in turn, constitute the primary force behind the business cycle, in Keynes's view.

But Keynes also uses the Wicksellian notion of the "natural rate" of interest, and disparities between the natural rate and "market rate" of interest, as an alternative way of depicting dynamic cumulative processes. Keynes uses the natural rate concept liberally as a synonym for the equilibrium rate of interest rather than referring to loanable funds theory as providing some, supposedly, unique real anchor. His analysis also concerns longer-run price level trends (apart from cyclical fluctuations) to the extent that profit inflations/deflations alter the course of income inflation, that is the general trend in nominal wages (adjusted for productivity growth) and incomes that prevails in (investment-saving) equilibrium.

The alternative Wicksellian mode of presentation more easily lends itself to capturing Keynes's foremost public policy concern: managing the banking system in such a way as to stabilize credit and the economy by keeping the market rate in line with the natural (i.e., equilibrium) rate of interest. Since "booms and slumps are simply the expression of the results of an oscillation of the terms of credit about their equilibrium position" (Keynes 1930a, 165), where:

credit is the pavement along which production travels; and the bankers, if they knew their duty, would provide that transport facilities to just the extent that is required in order that the productive powers of the community can be employed to their full capacity. It has been a principal object of this treatise to give a clear answer to these perplexities. What is the true criterion of a creation of credit which shall be non-inflationary (free, that is to say, from the taint of profit inflation—income inflation is a different matter)? We have found the answer to lie in the preservation of a balance between the rate of saving and the value of new investment. (Keynes 1930b, 197)

Keynes's *Treatise* is full of institutional detail and elaborate analyses of bank behavior. Keynes pays great attention to how profit-seeking banks manage their balance sheets in an ever-changing environment, conditioned by competition, business conditions, regulation, and monetary policy. Banks' pivotal role as credit providers and liquidity creators not only concerns the real economy (industrial circulation) but also the functioning of the financial system itself (financial circulation). Keynes presents all the ingredients of what was to become his "liquidity [preference] theory of interest" in *The General Theory*, highlighting the role of the banking

system in the working of the "excess-bearish factor," which captures the determination of financial conditions as shaping investment spending in Keynes's *Treatise* apparatus.⁴

Despite all the attention paid to institutional and behavioral banking matters, the *Treatise* is quiet on financial instability. Keynes investigates the credit cycle, not financial crises. There are rare hints sprinkled here and there about the Wall Street crash of 1929 and its immediate aftermath. But there is only a brief section titled "The Slump of 1930" at the end of the second volume in which Keynes offers his account of how developments over the 1920s led to said slump that marked the early stage of the Great Depression.⁵

In Keynes's narrative of events, the natural rate, which was temporarily elevated in the aftermath of WWI, declined markedly in the second half of the 1920s, while the market rate remained stuck at inappropriately high levels. The latter phenomenon was due to both misguided monetary policies, as well as special market factors. He singles out borrowings by governments under treaty obligations (distress borrowers) and attempts to restore the gold standard as a factor raising central banks' demand for gold, accompanied by long-term borrowings by governments and banks for the purpose of building up liquid reserves (in terms of dollar and sterling balances), as factors leading to tight credit conditions facing genuine business borrowers. As a third class of "artificial" borrowers, becoming a formidable force in 1928–29, Keynes identifies:

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⁴ Anticipating subsequent controversies, Keynes clearly pinpoints what I dubbed the "loanable funds fallacy" (Bibow 2000, 2009), stating:

I hope I have made clear the distinction between the two types of decision which the earning and wealth-owning public is being constantly called on to make. But however clear we may be about the distinction, it is nevertheless difficult to keep the causes and the results of the two types of decision disentangled, since they act and react on one another in a most perplexing way. For the amount of saving and the amount of investment, and consequently the difference between them, partly depend on the price level of investment goods relatively to their cost of production; and at the same time the attitude of the public towards savings deposits and other securities respectively may be partly influenced by expectations as to the price level of consumption goods relatively to their cost of production. In particular, a change in the disposition of the public towards securities other than savings deposits uncompensated by action on the part of the banking system, will be a most potent factor affecting the rate of investment relatively to saving and a cause of disturbance, therefore, to the purchasing power of money. Nevertheless, although these factors react on one another, the excess-saving factor and the excess-bearish factor (as perhaps we may call them) are independent in the sense that any degree, positive or negative, of the one is compatible in appropriate attendant circumstances with any degree, positive or negative, of the other. (Keynes 1930a, 130)

⁵ Keynes also published a two-part nontechnical article under the same title in *Nation & Athenaeum* in December 1930 that was later republished in *Essays in Persuasion*; see section 5.

speculative borrowers, who, once more, were borrowing not for investment in new productive enterprise, but in order to participate in the feverish "bull" movement in "equities" (mostly of a semi-monopolistic character which could not easily be duplicated), which was occurring most sensationally in the United States but also in varying degrees on most of the stock exchanges of the world. Moreover, the anxiety of conservative banking opinion to bring this speculative fever somehow to an end provided a new motive for credit restriction by the central banks. By the middle of 1929 "genuine" borrowers—if we may so designate borrowers for purposes of actual new investment which they deem profitable on the terms offering-whose activities were already, in my judgment, below par in most countries other than the United States, were becoming squeezed out. The more urgent needs of post-war reconstruction and of the new types of industry having been satisfied, it simply was not worth their while to borrow on a scale equal to the volume of savings at the high market rate of interest, which was being maintained partly by the "artificial" borrowers and partly by the credit policy of the central banks. The divergence thus arising between the market rate of interest and the natural rate was, therefore, the primary cause of the sagging price level. But once this had proceeded far enough to generate slump psychology in the minds of entrepreneurs, it was of course reinforced, as usual, by other and perhaps quantitatively greater influences. (Keynes 1930b, 341–42)

Keynes then provides an interpretation of events in terms of his business cycle theory and investment categories of the *Treatise*. He warns that profit deflation will push entrepreneurs to seek recourse to an

assault on the money incomes of the factors of production ... a dangerous enterprise in a society which is both capitalist and democratic. It would be foolish of us to come to grief at a time when the pace of technical improvements is so great that we might, if we choose, be raising our standard of life by a measurable percentage every year. It has been my role for the last eleven years to play the part of Cassandra, first on the economic consequences of the peace and next on those of the return to gold; I hope that it may not be so on this occasion. (Keynes 1930b, 346)

He urges to "use our banking systems to effect a proper adjustment of the market rate of interest" by pursuing "bank-rate policy and open-market operations à outrance" (Keynes 1930b, 346–47).

Keynes's influential role on the (Macmillan) Committee on Finance and Industry provided him an opportunity to apply his theoretical framework of the *Treatise* to Britain's struggles of the time, famously attacking the notorious "Treasury View" on that occasion (Keynes 1930c).⁶ The committee deliberated from February to December 1930 and issued its report on July 13, 1931.

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⁶ The background was that Keynes had lent his support to debt-financed fiscal expansion. See for instance "Can Lloyd George Do It?" (Keynes 1929a).

Beginning in March 1930 Keynes considered the emerging international depression as a superimposed factor adding to Britain's preexisting domestic troubles, focusing on effects of deflation on real investment.

However, both the *Treatise* and the Macmillan Report are mainly about the stagnation experience of the 1920s rather than the world crisis of the 1930s. That said, the Macmillan Report did identify the concentration of liquid claims, including gold, in key creditor countries (i.e., the United States and France) as the primary factor behind the unfolding global deflation.

5. KEYNES AS AN INVESTOR AND ECONOMIC COMMENTATOR DURING THE GREAT DEPRESSION

One finds Keynes's interpretation and explanation of unfolding events beginning with the Wall Street crash of 1929 in his contemporary writings and commentaries. His theoretical framework of the *Treatise* informed his views of developments at the early stages of the Great Depression. But given the speed at which he moved on from the *Treatise* to *The General Theory*, his perspective at the peak of the crisis in 1932–33 was already closer to his later work. His other informative writings are partly related to Keynes's own financial investment activities and partly to his journalistic activities, speeches, and correspondence. In passing we note that at the onset of the greatest economic crisis of the modern age Keynes did not shy away from publishing his most optimistic essay about longer-term prospects of humanity solving its economic problem through technological progress, titled "The Economic Possibilities for Our Grandchildren" (Keynes 1930c).

While the Wall Street crash of October 1929—just before which Irving Fisher (1929) had famously declared that "stock prices have reached what looks like a permanently high plateau"—is widely seen as the starting shot of the Great Depression, there was some controversy in the years leading up to the precrash market peak in 1929 about stock market overvaluation, inflation risks, and Federal Reserve policy that Keynes participated in.

An early example is Keynes's memo of April 14, 1927, prepared for a National Mutual board meeting, which is a response to a bearish account on the American stock market's position by his long-time investment partner O. T. Falk. Keynes disagrees with Falk's bearish outlook for US stocks that is leaving the "impression that the situation in the United States is more precarious and dangerous than in my opinion it really is." In Keynes's view:

... the general atmosphere, while exceedingly optimistic, is not of that wild or disorderly character which has in past times marked the boom periods which have preceded slumps. It would be a very remarkable and unprecedented thing if a serious slump were suddenly to supervene after two years of falling prices in a money market abundantly supplied with funds. I am not arguing that there is any good reason for expecting a large flow of fresh bank money into the stock market. I conclude only that none of the usual symptoms preceding serious malaise exist at the present time. (Keynes 1927)⁷

However, the expectation of a declining rate of interest appears to be a central part of his reasoning: "a steady downward tendency of the rate of interest is to be anticipated ... I do not see much risk of a movement of interest upwards" (Keynes 1927).

In his memo "Is There Inflation in the United States" (dated Sep 1, 1928), Keynes returns to the US position, now applying his *Treatise* concepts of industrial circulation and financial circulation.

Keynes attests that stock prices were "prima facie, judged by dividend yield and past records, ... extremely dear" (Keynes 1928, 57). His key concern however was that aggressive tightening by the Federal Reserve would cause a slump in (real) investment, choking the economy. Keynes argues that rising stock prices as such do not represent inflation and that any effects on the economy and inflation would only arise indirectly by (over-)stimulating investment. The impact of bank lending on asset prices is complex, as banks may either boost prices by buying assets themselves or lending to players who do, or merely be facilitating "difference of opinion" (contrasting views within the markets) by lending to bullish investors and simultaneously providing term deposits that satisfy the liquidity preference of bearish stock sellers. He judges that short-term loans to the stock market are always a factor but rarely a decisive one, and that

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⁷ All unpublished Keynes sources quoted in this paper are held in the: King's College Archive Centre, Cambridge, The Papers of John Maynard Keynes, JMK. Quoted with permission.

the "existence of a powerful opposition to the bull market is a moderating influence on investment." He warns that expansion of finance-related dealings (financial circulation) can even have a deflationary effect on the economy—unless accommodated by the Federal Reserve—namely, if financing Wall Street curtails business loans (industrial circulation). He advises against attacking the rising stock market by monetary tightening:

What really matters to the stock market is how the ordinary investor is feeling about the business outlook. I should be inclined, therefore, to predict that stocks would not slump severely (i.e. below the recent low level) unless the market was discounting a business depression. Continued monetary stringency might easily bring about such a depression, or at least the anticipation of one. But it can hardly be the intention of the [Federal Reserve Board] to bring about a business depression ... I should have supposed that if—as seems quite likely—stocks are destined to go to a figure which is too high on any reasonable criterion, even with good trade as a permanency, they will, in due course, boil over of themselves. This would be in accordance with previous experience (Keynes 1928a, p. 58).

In a related earlier memo, dated July 29, 1928, which focused on banks and the call money market, Keynes had concluded that he felt "cautious and unwilling to be over-invested or to hold too many sensitive securities. But it is not enough to make me believe that we are at an important turning-point or feel indiscriminately bearish." However, Keynes also observed there "as we know in this country, it is always rash to predict limits to the folly of central bankers" (Keynes 1928b).

Ten months later, and only shortly before the market peak in 1929, Keynes once again responded to Falk's outlook for US stocks, which had turned bullish again in the meantime, in disagreement. In a memo dated July 2, 1929, Keynes observes: "I seem to be destined to disagree with Mr. Falk about the prospects of the American market. ... Taking everything into account, the market now seems to me a much more dangerous one for Bulls than I thought it [ten months ago]." He concludes that: "to enter the market at this moment is to enter it at a time when prices are discounting the future to an unexampled extent, yet when the present is so good that the economic body will surely have to take a rest before it will have the strength for yet a further leap forward. That the United States often does the unexpected is undoubted. But the market seems to me a dangerous one, relatively to the prospects of large further gains, for newcomers to enter at this state" (Keynes 1929b).

Wall Street crashed three months later in October 1929 and the US economy was to take a sharp turn for the worse in due course—with global repercussions that became known as the Great Depression.

Just around that time, in late October 1929, the Dutch company Philips invited Keynes to contribute to the Economic Intelligence Service (EIS), reporting mainly but not exclusively on the British Empire situation. Starting in January 1930, Keynes wrote monthly reports for them until the end of 1931, followed by quarterly reporting in the years 1932–34. These reports offer valuable insights into his contemporary assessments of the evolving situation during the Great Depression.

Keynes's first EIS letter of January 1930 titled "The Position in Great Britain" observes:

The longer look ahead depends on the general world position, which urgently requires a prolonged period of very cheap money. In present circumstances moderately cheap money will probably prove quite insufficient to give the necessary stimulus. I feel no particular alarm about the prospects of the United States, though presumably 1930 can hardly hope to be quite so good as 1929. The real seat of the trouble is in the state of the main overseas markets, which is almost wholly due to the reduced volume of loans issued on the international investment markets and to falling commodity prices. Both these troubles are traceable to the almost unprecedentedly dear money prevailing throughout the world in the middle of 1929, coming on top of a situation which was already none too good owing to the previous fall of commodity prices. Whatever happens from now onward, we seem almost certain to have a depressed period in overseas markets for another six months, during which extreme caution will be desirable. (Keynes 1930e)

Keynes added that he was particularly disturbed about the outlook in Germany for 1930.

His May 1930 EIS letter starts: "Up to Easter it appeared as if the situation might be stabilizing itself. But since Easter there has been a serious setback in every respect. We have to adjust our opinions to the fact that we are undoubtedly in the middle of a major depression at least as serious as the major depressions of the pre-war period, such for example as 1907. In fact, the extent and rapidity of the fall of international wholesale prices has been greater than on any occasion, apart from the 1921–22 slump, in the last seventy years" (Keynes 1930f). Keynes repeats there that any recovery would depend, in the first instance, on cheap money. He repeats this take on the ongoing "cyclical depression" and adds that, while in England people are perhaps

too pessimistic, "in the United States they are not pessimistic enough because they are inclined to regard [what is happening] as one of the several minor recessions which have been experienced since the war, and not as a major recession. Indeed, the over-optimism of the United States seems to me to be a real danger, since there may be a revulsion of feeling as it becomes clearer that a rapid recovery is scarcely to be hoped for" (Keynes 1930f).

The global situation deteriorated further in the second half of 1930. In September 1930, Keynes declared that "we are now in the middle of one of the major slumps of recent economic history. Indeed, if we measure the magnitude of events by the fall of prices from the average of the preceding three or four years, the extent and rapidity of the fall are perhaps the most severe that have ever been experienced in modern times" (Keynes 1930g). By now Keynes was especially alarmed about the situation in Germany and the United States. But he expected things to get worse in general. In a letter to Walter Case dated December 16, 1930, Keynes observes: "My own up-to-date feeling as to the general position is one of extreme pessimism. Sometimes I think that we are only approaching the acute phase of the depression and that there may still be some shattering disillusions to come. However this may be, I cannot perceive the least reason in the world for expecting an early recovery" (Keynes 1930h;).

Keynes elaborates on the disastrous consequences of deflation in his two-piece article, first published in *The Nation and Athenaeum* in late December 1930, titled "Great Slump of 1930" (republished in *Essays in Persuasion*). Stressing that deflation increases the burden of the debt, he focuses on "bonded debt" and international debt relationships rather than banking. He questions "whether the necessary adjustments could be made in time to prevent a series of bankruptcies, defaults, and repudiations which would shake the capitalist order to its foundations [and warns:] Here would be a fertile soil for agitation, seditions, and revolution" (Keynes 1930i). Applying his *Treatise* framework to diagnose the sources and potential remedy of the situation, he advises that internationally coordinated and courageous central bank action was needed to stop the slump:

A wide gulf ... is set between the ideas of lenders and the ideas of borrowers for the purpose of genuine new capital investment; with the result that the savings of the lenders are being used up in financing business losses and distress borrowers, instead of financing new capital works. ... no one can take the first step except the central banking authorities of the chief creditor countries; nor can any one Central Bank do enough acting in isolation. Resolute action by the Federal Reserve Banks of the United States, the Bank of France, and the Bank of England might do much more than most people, mistaking symptoms or aggravating circumstances for the disease itself, will readily believe. In every way the most effective remedy would be that the Central Banks of these there great creditor nations should join together in a bold scheme to restore confidence to the international long-term loan market; which would serve to revive enterprise and activity everywhere, and to restore prices and profits, so that in due course the wheels of the world's commerce would go round again. (Keynes 1930i, 145–46)

But his outlook was quickly turning more gloomy. His February 1931 EIS letter states:

... previous letters were pessimistic but not pessimistic enough. ... It will be prudent in all activities to act on the assumption that there will be a further disillusionment after the Spring. The chief factors may be summarized as follows. Wholesale prices are still falling heavily. They are now so low that even a moderate recovery would not do much to rectify the situation. The difficulties of debtor countries exporting raw materials are increasing, since they are at the same time unable to borrow and unable to sell their produce at a reasonable price. The prospect of long series of defaults during 1931 is not to be excluded. The value of building and construction contracts in the United States does not yet show any sign of recovery. This is an important indicator, because it is available at a date appreciably in advance of that at which the actual expenditure will be incurred. In short, I do not see the slightest signs of the foundations of recovery being laid anywhere. It is at least possible that the position may get worse, or if not that a long interval may elapse before it gets really better (Keynes 1931a).

In his May 1931 EIS letter, Keynes observes: "I have been forecasting for some time that the American market will suffer at least one further disillusion, and that this might have a serious effect on prices. This disillusionment has now duly matured. The foolish and quite unfounded hopes of an early recovery have now been abandoned by almost everyone. There is indeed, no rift in the clouds. I still see no reason whatever for any real recovery in world prosperity in the near future. It would be safer to base all plans on this assumption than on more optimistic hopes" (Keynes 1931b).

His June 1931 EIS letter, his last one before his visit to the United States, states:

The most important development of the last month has been the severe slump in the prices of almost all shares, apart from Government securities, on the London Stock Exchange. This has been paralleled by similar weakness in the United States and on most European bourses. In many cases the decline of prices has gone much further than on previous occasions of slumping values in the last year or two; and for the first time it is possible to say that what can only be described as panic prices, having little or no relation to intrinsic values, are prevailing. This suggests that we are now entering the crisis, or panic, phase of the slump. I am inclined to think that when we look back on this particular slump we shall feel that this phase has been reached in the summer months of 1931, rather than at any earlier date. That is to say, I should expect the climax of the slump to be reached in the course of the next ensuing months. It may very well be that the worst point of the crisis will be precipitated by a rapid deterioration of the German position. The difficulties of the Credit-Anstalt in Vienna have produced a great impression on high financial circles in London and America, and have given them a great shock. (Keynes 1931c)

The American Visit, 1931

Keynes developed a much clearer picture of the severity of the crisis and the centrality of banking in it when he visited the United States in June–July 1931, departing from Britain on May 30, 1931 (Skidelsky 1992). But the situation in Europe was also fast deteriorating following the collapse of Vienna's Credit-Anstalt Bank earlier in May, which saw banking problems spreading across Austria, Germany, and Central Europe. Even before Keynes's return to Britain in mid-July, market volatility had reached London, with sterling coming under pressure on the foreign exchanges and money market rates rising as the Bank of England was losing gold.

In the United States, Keynes gave a number of lectures, participated in discussion groups, and met with economists, central bankers, bankers, government officials, and other informed observers. He quickly became acutely aware that the US banking system was in a critical shape. The fragility of US banks arose from their risky and illiquid balance sheet positions—paired with a rising preference for safety and liquidity on the public's part. The risk was that deflation would produce more stress in the domestic US banking system, just as debtor countries might be driven into default owing to falling prices of the products they export.

Keynes gave two lectures at the New School for Social Research in New York City on June 15th and 18th. In the first lecture, titled "Do We Want Prices to Rise?," he discusses the option of deflation as expediting "liquidation" versus reflation of prices. He firmly rejects the expediency of the former option, describing liquidation as a "polite phrase for general bankruptcy ...

national debts, war debts, obligations between the creditor and debtor nations, farm mortgages, real estate mortgages;—all this financial structure would be deranged by the adoption of Dr. Sprague's proposal [of deflation]. A widespread bankruptcy, default and repudiation of bonds would necessarily ensue. Banks would be in jeopardy" (Keynes 1931d, 547). In his second lecture, titled "What Can We Do to Make Prices Rise?," he advises to "increase the quantity and reduce the cost of banking credit" (Keynes 1931e, 550), but acknowledges that "the present depression may prove to be one of the longest on record [because] the rate of interest may need to be driven down a great way before we recover" (Keynes 1931e, 553).

His subsequent Harris Foundation lecture series in Chicago provides more elaborate analyses of the investment slump and surge in unemployment. Excessively high interest rates feature prominently. According to Keynes, interest rates needed to decline as the expansion progressed but instead increased—for which he blames the Federal Reserve:

But just at this moment, so far from falling, the rate of interest was rising. The efforts of the Federal Reserve Banks to check the boom on Wall Street were making borrowing exceedingly dear to all kinds of borrowers. ... A further consequence of the very dear money in the United States was to exercise a drag on the gold of the rest of the world and hence to cause a credit contraction everywhere. ... And a third consequence was the unwillingness of American investors to buy foreign bonds since they found speculation in their own common stocks much more exciting. (Keynes 1931f, 350).

In his policy advice on what in his view is "essentially a technical banking problem ... [and] preeminently the business of the central banker" Keynes (1931g, 363) emphasizes the need to restore confidence and to reduce long-term interest rates. Additionally, he suggests that debtfinanced public construction programs should be part of the solution.

In private correspondence with Hubert Henderson on June 22, 1931, Keynes appears to be far less optimistic that his suggested credit easing advice could actually work because the banks are already in very poor shape:

Quite apart from the immediate situations, German or other, the effect on the situation here which I had most underestimated before I came was the position of many banks in the country. A very great proportion of the member banks, measured in number, and a fairly substantial proportion, measured in assets (perhaps as much as 10 per cent) are probably not solvent today, if their assets

were to be valued strictly. They have purchased great quantities of second-grade bonds which have depreciated and their advances to farmers and against real estate are inadequately secured. ... Owing to the number of banks which have actually failed there is great unrest amongst depositors. There is a possibility at any moment of bank runs breaking out in different parts of the country, similar to what was lately experienced at Chicago. The consequence is that depositors not infrequently take their money out in cash and keep it in a safe deposit box. ... This means that the banks in their turn are extraordinarily nervous, even those which are perfectly solvent, since they never know when they may have to support a run from their depositors. Accordingly they have an absolute mania for liquidity. They put pressure on their customers to repay loans, since loans and advances are nonliquid in an emergency. Generally speaking, they turn all the assets they can into a fairly liquid form and in some cases keep an abnormally large amount of till money. As long as this mentality exists on the part of depositors and banks, and it is obvious that in the circumstances it is entirely intelligible, since many banks are in fact not safe, whilst the members of the general public cannot tell which the dangerous ones are, it overshadows the whole situation. It is a large part of the explanation of the failure of the bond market to make more progress. Whenever the less saleable bonds improve a little in price and become more saleable, some bank takes the opportunity to get more liquid. It is indeed a vicious circle. The anxiety of the banks to get liquid keeps the bond market weak (I mean the bond market for second-grade bonds) and so long as the bond market is weak the position of the banks remains precarious. ... It is the weakness of the banking system all over the country which primarily stands in the way of the usual remedy, cheap and abundant credit, failing to take effect. (Keynes 1931h, 556–57)

In his speeches in Chicago, Keynes addresses the "Hoover Moratorium," which was declared on June 20, 1931 and effectively ended the Versailles reparations saga, deploying his *Treatise* model to explain the ongoing slump. His remarks at a round table on July 1, 1931 at the Harris Foundation Institute shed more light on why he considers banking fragility as particularly critical:

The more I hear about the situation here, the more I attach importance to [banking fragility]. I think one of the occasions of the excessive lending by banks imprudently against real estate is the fact that the volume of their deposits is so large in relation to the quantity of short-term sound assets that there are to go around that they are driven to the investment not entirely suitable for a banking system. Also, this makes the whole community much more vulnerable to a change in the value of money, because you have a whole lot of people owing a whole lot of other people very large sums of money, and then holding assets against those, instead of there being a direct investment by the public in the assets; if you got the direct assets themselves, changes in the value of money would not be so dangerous, but if the ultimate owners of the wealth have it in terms of money, and somebody owes them that money and buys assets against it, then any change in the value of money sets up an appalling strain and it is a very dangerous position. (Keynes 1931i, 539)

Keynes returned to England on July 18, 1931, a few days after the publication of the Macmillan Report (July 13, 1931) and Germany's default (on July 15, 1931), events that added to the pressures on London with its large net short-term debtor position. During his Atlantic crossing, Keynes prepared a memorandum for the Economic Advisory Council that he was a member of on economic conditions in the United States. Keynes expresses the belief that the Federal Reserve leadership leaned decidedly in favor of raising prices (the "monetary school") as opposed to letting deflation running its course (the "equilibriumists") but senses that they may be less confident than Keynes in their powers to accomplish their aim. Keynes views the US domestic situation primarily as a construction slump and again emphasizes the pivotal role of banking fragility: "The banks' ratio of capital and reserves to liabilities is often small, so that even moderate losses wipe it out" (Keynes 1931j, 568). The trouble is that banking losses in the United States were far worse than moderate:

The truth is that the financial structure of the United States is no more able than that of the rest of the world to support so terrific a change in the value of money. The vast growth of bank deposits and of bonded indebtedness in that country interposes a money contract between the real asset on the one hand and the ultimate owner of wealth on the other. A depreciation in the money value of the real asset, sufficient to cause margins to run off, necessarily tends to burst up the whole structure of money contract, particularly those short-term contracts represented by bank deposits. I think it would be true to say that the first preoccupation of Governor Meyer is to restore solvency and liquidity to his member banks and that the objective of restoring the level of output to normal is at present remote. ... After observing this background, I understand much better than I did part of what lies behind Dr. Sprague's ["equilibriumist"] attitude, his feeling that no good can come until insolvencies have progressed much further and a large amount of monetary indebtedness wiped out. But if we are to proceed along these lines, how much of the financial structure would be left standing when we were done, I do not know. To counsel this way out seems to me to be, even for a philosopher, a counsel of despair; whilst for one attached to a central bank, it is suicidal, because it means sacrificing what the central banks exist to safeguard. But whilst we ought, in my judgement, to bend every effort to move the course of events in the opposite direction to that which Dr. Sprague recommends, it is not wise to underestimate the extraordinary difficulties in doing so. (Keynes 1931, 571–72)⁸

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⁸ A curious remark by Keynes regarding the political clout of Wall Street deserves mentioning here. The context is the Hoover Moratorium and the (positive) change in mind it caused in all quarters (partly owing to the "inherent reasonableness of Americans"). Keynes observes that "Democrats ... are just as dependent on Wall Street for funds as the Republicans are" (Keynes 1931j, 587).

Keynes's spontaneous reactions in speeches and correspondence to the unfolding US banking crisis led to what may be his clearest analysis of the banking troubles, published in August 1931 as "The Consequences to the Banks of the Collapse of Money Values" (and republished in *Essays in Persuasion*).

Referring to the serious embarrassment of the banks in many parts of the world, Keynes describes how expanding banking systems and bond and mortgage markets have established a "veil of money between the real asset and the wealth owner." While observers are generally "familiar with the idea that changes in the value of money can gravely upset the relative positions of those who possess claims to money and those who owe money," causing wealth transfers between creditors and debtors, Keynes draws attention to another development that comes to the fore when there is a very large change in the value of money and a hefty decline in the money value of assets. Keynes describes that banks will normally leave a sizeable margin when lending against collateral (i.e., not make loans to the full value of the asset), and this margin of safety protects them against asset price declines. He then observes that for the first time in modern history, a "world-wide collapse over almost the whole field of the money values of real assets" has created a situation where "the 'margins' have run off':

The exact details of this are not likely to come to the notice of the outsider until some special event—perhaps some almost accidental event—occurs which brings the situation to a dangerous head. For, as long as a bank is in a position to wait quietly for better times and to ignore meanwhile the fact that the security against many of its loans is no longer as good as it was when the loans were first made, nothing appears on the surface and there is no cause for panic. Nevertheless, even at this stage the underlying position is likely to have a very adverse effect on new business. For the banks, being aware that many of their advances are in fact "frozen" and involve a larger latent risk than they would voluntarily carry, become particularly anxious that the remainder of their assets should be liquid and as free from risk as it is possible to make them. This reacts in all sorts of silent and unobserved ways on new enterprise. For it means that the banks are less willing than they would normally be to finance any project which may involve a lock-up of their resources. (Keynes 1931k, 172–73)

In short, Keynes argues that widespread deflation and collapse in asset prices left the economy in the grip of a credit crunch that risks further choking economic activity, even if general panic has not yet struck. Almost every asset class is part of the banks' problem. Only limited relief derives from highest-grade bonds, which have risen in value or declined only mildly. The British

banking system is in better shape than banks elsewhere because in Britain real estate values have held relatively firm and banks stayed clear from higher-risk bonds. In the United States, by contrast, these are areas of special concern. In many countries, business (working capital) loans are in the worst condition as "in present circumstances for many classes of producers of raw materials, of farmers and of manufacturers, there are no profits and every prospect of insolvencies, if matters do not soon take a turn for the better" (Keynes 1931k, 175).

In what follows, Keynes provides what may be one of his most brutal and memorable verdicts, deriding banks and bankers—"who are by nature blind"—and their "so-called 'economists' who tell us even today that our troubles are due to the fact that the prices of some commodities and some services have not yet fallen enough, regardless of what should be the obvious fact that their cure, if it could be realized, would be a menace to the solvency of their institution. A 'sound' banker, alas! Is not one who foresees danger and avoids it, but one who, when he is ruined, is ruined in a conventional and orthodox way along with his fellows, so that no one can really blame him" (Keynes 1931k, 176).

Keynes seems to put the blame squarely at the door of the monetary authorities for doing "too little, too late." His outlook seems grim when he attests that, by the summer of 1931, developments had reached the point where avoiding the worst had become "extraordinarily difficult":

But today they are beginning at last to take notice. In many countries bankers are becoming unpleasantly aware of the fact that, when their customers' margins have run off, they are themselves "on margin." I believe that, if today a really conservative valuation where made of all doubtful assets, white a significant proportion of the banks of the world would be found to be insolvent; and with the further progress of Deflation this proportion will grow rapidly. Fortunately our own domestic British Banks are probably at present—for various reasons—among the strongest. But there is a degree of Deflation which no bank can stand. And over a great part of the world, and not least in the United States, the position of the banks, though partly concealed from the public eye, may be in fact the weakest element in the whole situation. It is obvious that the present trend of events cannot go much further without something breaking. If nothing is done, it will be amongst the world's banks that the really critical breakages will occur. ... The present signs suggest that the bankers of the world are bent on suicide. At every stage they have been unwilling to adopt a sufficiently drastic remedy. And by now matters have been allowed to go so far that it has become extraordinarily difficult to find any way out. (Keynes 1931k, 176–78)

Keynes's July 1931 EIS letter sums up his by now very gloomy global outlook based on his US visit: "A somewhat intensive sight of present conditions in the United States has served to convince me that quite apart from European complications, it is quite out of the question that there should be anything which could be called a true recovery of trade at any time within, say, the next nine months. The necessary foundations for such a recovery simply do not exist" (Keynes 19311).

While his American visit had brought banking troubles to the center of his attention, upon returning home, Keynes's interest naturally shifted back to British economic conditions in general and the country's balance of payments and currency situation in particular. He writes to Richard Kahn on August 13, 1931, prophesying sterling's departure from gold "within a month unless heroic measures are taken" (Keynes 1931m, 594–95). Keynes argues with Falk on September 18, 1931 that the Independent Investment Trust managed by the two men should not speculate against sterling and try to profit from it, but should instead accept taking losses (Keynes 1931n, 611–12). And he intensifies his fight against the official policy of austerity (the "frenzied economy campaign") at various fronts.

Sterling left gold on September 21,1931. Keynes was acutely aware that the international situation was highly precarious. On September 30, 1931, Keynes writes to British Prime Minister Ramsay Macdonald:

I wonder if those who are pressing you towards a general election appreciate the rapid developments towards an unprecedented banking crisis which are proceeding in the rest of the world. It seems to me that there are now two alternative courses which events may take in the near future. The first would be for country after country to tumble off gold parity. The second would be a general banking moratorium outside this country, but including France and the U.S.A. I think the latter may be perhaps the more probable because whereas in our case it was primarily a balance of payments crisis and not a banking crisis at all, elsewhere it is primarily a banking crisis. Further developments would necessarily lead up to a world conference, in which we—almost alone in the world in having a solvent banking system—would have the strong position. (Keynes 1931o, 617–18)

On October 1, 1931, Keynes writes to David Lloyd George with some excitement about the prospect that the latter would "lead the Liberal Party—or what is left of it—into the fight in an honorable alliance with Labor" going on to argue that:

I do not think that those who are pressing for an election probably realize the extraordinarily critical character at this moment of the international financial situation. Our own problems are more or less solved for the moment. The reports I hear about the stimulus to British exports and the buzz of business which is going on are quite extraordinary. But abroad things are still crashing to destruction. I doubt if there is now a solvent bank in the whole of the United States. Some considerable disasters cannot be far off, and they are bound to lead up pretty quickly to a first-class international situation. (Keynes 1931p, J620–21)

Sterling's departure from gold enlarged Britain's policy space and Keynes was going to call on the Bank of England to engage in actively lowering longer-term interest rates in due course. On the other hand, Keynes was acutely aware that Britain had only bought itself some breathing space while remaining entrapped in the global depression, mentioning in a letter to Walter Case dated November 2, 1931:

I am sure that British optimism is at present carried too far by enthusiasm over the changed local situation and is paying too little attention to the continuance of depressed and dangerous conditions abroad. ... So I expect the world depression to continue some time yet and one day Great Britain will wake up to the fact that there are strict limits to the degree of recovery which a country can gain from what is nothing but a change in tis domestic circumstances and in its relationship to the rest of the world. (Keynes 1931q, 11–12)

German Visit, 1932

Keynes's visit to Germany in January 1932, which included a lecture in Hamburg, titled "The Economic Prospects 1932," and a meeting with Chancellor Heinrich Brüning in Berlin, afforded him new insights into the depth of the crisis in that country. In an article titled "An End of Reparations?," published a week after his visit, he observes that Germany was "in the grip of the most terrible deflation that any nation had experienced" (Keynes 1932a, 366). In his Hamburg lecture Keynes remarked that it was surprising that Germany has not yet suffered a "collapse of her political and social organization." He also looks back and recalls his *The Economic Consequences of the Peace*, describing the Versailles Treaty as "one of the greatest errors of international statesmanship ever committed" (Keynes 1932b, 46).

His Hamburg lecture shows that at this point Keynes saw the Great Depression foremost as a financial crisis rather than a severe business downturn. In fact, he now saw the risk that the financial structure might fully collapse. His assessment of the situation deserves to be quoted here at length, as it features an idea that appears here for the first time: a "competitive panic to get liquid" driving the general collapse in prices that, according to Keynes, "feeds on itself":

The immediate problem for which the world needs a solution today is essentially different from the problem of a year ago. Then it was a question of how we could lift ourselves out of the state of acute slump into which we had fallen and raise the volume of production and of employment back towards a normal figure. But today the primary problem is how to avoid a far-reaching financial crisis. There is now no possibility of reaching a normal level of production at any reasonably early date. Our efforts are directed towards the attainment of more limited hopes. Can we prevent an almost complete collapse of the financial structure of modern capitalism? With no financial leadership left in the world and profound intellectual error as to causes and cures prevailing in the responsible seats of power, one begins to wonder and to doubt. At any rate, no one is likely to dispute that the avoidance of financial collapse, rather than the stimulation of industrial activity, is now the front-rank problem. The restoration of industry must come second in order of time. The immediate causes of the financial panic—for that is what it is—are obvious. They are to be found in a catastrophic fall in the money value not only of commodities but of practically every kind of asset,—a fall which has proceeded to a point at which the assets, held against money debts of every kind including bank deposits, no longer have a realizable value in money equal to the amount of the debt. The "margins" as we call them, upon confidence in the maintenance of which the debt and credit structure of the modern world depends, have "run off." The assets of banks in very many countries—perhaps in all countries with the probable exception of Great Britain—are no longer equal, conservatively valued, to their liabilities to their depositors. Debtors of all kinds no longer have assets equal in value to their debts. Few governments still have revenues equal to the fixed money charges for which they have made themselves liable. Moreover a collapse of this kind feeds on itself. We are not in the phase where the risk of carrying assets with borrowed money is so great that there is a competitive panic to get liquid. And each individual who succeeds in getting more liquid forces down the price of assets in the process of getting liquid, with the result that the margins of other individuals are impaired and their courage undermined. And so the process continues. It is, perhaps, in the United States that it has proceeded to the most incredible lengths. But that country only offers an example, extreme owing to the psychology of its people, of a state of affairs which exists in some degree almost everywhere. The competitive struggle for liquidity has now extended beyond individuals and institutions to nations and to governments, each of which tries to make its international balance sheet more liquid by restricting imports and stimulating exports by every possible means, the success of each on in this direction meaning the defeat of someone else. Moreover every country tries to stop capital development within its own borders for fear of the effect on its international balance. Yet it will only be successful in its object in so far as its progress towards negation is greater than that of its neighbors. Where and how is this ghastly internecine struggle to stop? At the moment we are living on slender hopes of some sort of a seasonal recovery in the New Year which will reverse the trend. If these hopes fail, as they well may, it would not surprise me to see a closing of stock exchanges in almost all countries and an almost universal moratorium in respect of the repayment of existing debts. But what then? Through lack of foresight and constructive imagination the financial and political authorities of the world have lacked the courage or the conviction at each state of the decline to apply the available remedies in sufficiently drastic doses; and by now they have allowed the collapse to reach a point where the whole system may have lost its resiliency and its capacity for a rebound. (Keynes 1932b, 39–41)

While the self-defeating "competitive panic to get liquid" risks collapsing the financial structure, Keynes was hopeful that Britain's abandonment of the gold standard would unleash positive consequence in Britain and beyond. First, it stopped the general decline in prices in Britain and the sterling area. Second, it meant focusing pressures on key countries occupying net creditor positions through:

setting into motion of natural forces which are absolutely certain in course of time to undermine and eventually destroy the creditor position of the two leading creditor gold countries [i.e., France and the United States]. ... The undermining of the competitive position of the export industries of these gold countries will be, in truth, in response to their own request;—or, at any rate a case of poetic justice. The rest of the world owes them money. They will not take payments in goods; they will not take it in bonds; they have already received all the gold there is. The puzzle which they have set to the rest of the world admits logically of only solution, namely that the rest of us should find some way of doing without their exports. The expedient of continually reducing world prices failed; for prices were dragged down equally everywhere. But the expedient of exchange depreciation relatively to gold will succeed. Thus a process has been set moving which may relieve in the end the deflationary pressure. The question is whether this will have time to happen before financial organization and the system of international credit break under the strain. If it does, then the way will be cleared for a concerted policy of capital expansion and price raising—which one can call inflation for short—throughout the world. For the only alternative solution which I can envisage is one of the general default of debts and the disappearance of the existing credit system, followed by a rebuilding on quite new foundations. (Keynes 1932b, 44–45)

Keynes subsequently reworked his Hamburg lecture and delivered it twice in Cambridge in February 1932. In the updated version he elaborated on the "competitive struggle for liquidity," featuring in the financial panic by contrasting microeconomic and macroeconomic reasoning and providing more global macroeconomic context as well, context that is highly relevant for interpreting his *General Theory* (which he had begun working on in 1931). Regarding the international competitive struggle for liquidity, Keynes observes:

We have here an extreme example of the disharmony of general and particular interest. Each nation, in an effort to improve its relative position, takes measures injurious to the absolute prosperity of its neighbors; and since its example is not confined to itself, it suffers more from similar action by its neighbors than it gains by such action itself. Practically all the remedies popularly advocated today are o this internecine character. Competitive wage reductions, competitive tariffs, competitive liquidation of foreign assets, competitive currency deflations, competitive economy campaigns, competitive contractions of new development all are of this beggar-my-neighbor description. The modern capitalist is a fairweather sailor. As soon as a storm rises he abandons the duties of navigation and even sinks the boats which might carry him to safety by his haste to push his neighbors off and himself in. I have spoken of competitive economy campaigns and competitive contractions of new development. But perhaps this needs a little more explanation. An economy campaign, in my opinion, is a beggar-my-neighbor enterprise, just as much as competitive tariffs or competitive wage reductions, which are perhaps more obviously of this description. For one man's expenditure is another man's income. Thus whenever we refrain from expenditure, whilst we undoubtedly increase our own margin, we diminish that of someone else; and if the practice is universally followed, everyone will be worse off. An individual may be forced by his private circumstances to curtail his normal expenditure, and no one can blame him. But let no one suppose that he is performing a public duty in behaving in such a way. An individual or an institution or a public body, which voluntarily and unnecessarily curtails or postpones expenditure which is admittedly useful, is performing an anti-social act. (Keynes 1932c, 52–53)⁹

Glimpses of Optimism for Britain

In a piece titled "Reflections on the Sterling Exchange," published in April 1932, Keynes (1932d, 79) sounds more hopeful regarding the British situation: "It is reasonable to hope that we are now moving out of the phase of financial crisis, at least so far as Great Britain is concerned. If there were to be a satisfactory settlement of reparations, even though the immediate effect on Central Europe proves disappointing, this phase would certainly be over. But it may need a prolonged interval of ultra-cheap money before the phase of industrial crisis begins definitely to pass away. ... The real risk lies in the recovery being too slow; and a bold policy will be the least dangerous."

Public agitation in Britain in favor of ultra-cheap money paired with public investment (rather than public economy campaigns) continued in parallel with Keynes's ongoing work on *The General Theory*. Correspondence shows that Keynes turned more optimistic toward the end of 1932. In November 1932 he remarked that "we are still in the phase of the authorities becoming converted to remedies about a year late, and after they have ceased to be adequate" (Keynes

⁹ Meltzer's (1988) critique that Keynes presents a model of a closed economy in *The General Theory* is utterly beside the point.

1932e). In December 1932, he observes that "under the surface I am sure that there is a general movement towards better business" (Keynes 1932f;) and that he considers it "most important as regards the future to remember that slumps do some time come to an end. They are not brought to an end by a sensational improvement in the fundamental evils of the situation, but by a slow grinding away of underground forces of various kinds. It is the belief, though perhaps belief is too strong a word, that forces of this kind are at work, which makes my forecasts inclined to be a little better than what seem to be the facts" (Keynes 1932f).

America's "New Deal"

In the United States, the Great Depression only reached its nadir in 1933, with unemployment peaking at 25 percent. Frustrated with President Herbert Hoover's economic programs, America had elected the former governor of New York State, Franklin D. Roosevelt, as their president in late 1932, who had promised policy activism and "bold persistent experimentation" during his campaign.

Keynes was not immediately impressed by Roosevelt's "New Deal." In a letter to Clive Baillieu dated May 17, 1933, Keynes remarks "On the general situation I still find it extremely difficult to take the American situation quite seriously. If one keeps one's eyes firmly on fundamentals, Roosevelt has as yet done literally nothing. Indeed one might argue that it is less than nothing, since his positive acts up to date are on balance deflationary. Moreover, apart from open market operations, one does not see much sign of his taking any positive action in the near future. I cannot help thinking that he hopes to carry through on his bluff" (Keynes 1933a). However, his EIS letters of the summer of 1933 seem more positive that Roosevelt's commitment to inflationary policies and recovery will ultimately bear fruit.

In late 1933 and early 1934 Keynes published his famous letters advising President Roosevelt to take bold action on capital expenditures. He puts much emphasis on the role that ultra-cheap money policies and the conversion of the war loan played in Britain in reducing long-term interest rates. The United States devalued the gold dollar in January 1934 (setting \$35 per fine ounce as the new gold price). Keynes saw new scope for declining long-term interest rates. In a piece titled "Can America Spend Its Way into Recovery?" published in December 1934, he

answers: "Why, obviously!—is my first reflection when I am faced by this question. No one of common sense could doubt it, unless his mind had first been muddled by a 'sound' financier or an 'orthodox' economist. We produce in order to sell. In other words, we produce in response to spending. It is impossible to suppose that we can stimulate production and employment by refraining from spending. So, as I have said, the answer is obvious" (Keynes 1934a, 334).

In his final EIS letter of December 1934, Keynes declares that he was "inclined to be a little more optimistic about the possibilities of the first half of 1935" (Keynes 1934b). Keynes put his money where his mouth is. He had taken heavy losses on his private financial investments in the run-up to the Wall Street crash and Great Depression, primarily on commodity speculations that went awry. Keynes's private wealth peaked in 1936, the year *The General Theory* was published, owing primarily to concentrated investments in British equities.

This section served to establish that Keynes paid very close attention to economic developments during the Great Depression. His private investments, related activities, and business interests were one factor. He was known for keenly absorbing economic statistics in general which, no doubt, would have informed and inspired his theorizing as well. Keynes was aware that the global economic crisis was especially deep in the United States and Germany. He fully appreciated the importance that the banking crisis played in the United States. He was equally appreciative of the role that international debtor-creditor relationships played in the international financial crisis at the time—which had important roots in the Versailles settlement that he had raged against and the gold standard that he had declared a "barbarous relic" a decade earlier. But how exactly did all this inform the economic theories he presented in *The General Theory* that were to "revolutionize" economics and establish macroeconomics as a distinct discipline? The next section will address that important question. The short answer is that, despite Keynes's deep understanding of what happened in the banking and global financial systems during the Great Depression, these issues are not developed or hardly addressed in *The General Theory*.

6. THE GENERAL THEORY AND ITS PECULIAR GENERAL SILENCE ON THE GREAT DEPRESSION

The General Theory is commonly associated with the events of the Great Depression. It is widely held that the Great Depression inspired *The General Theory*, that it lent victory to the "Keynesian revolution," and that Keynes was theorizing about "depression economics" in his famous book. ¹⁰ More than anyone else, Hicks (1937) laid the groundwork and helped establish the view that *The General Theory* was really a special theory about depressions that could be neatly fitted ("synthesized") into the seemingly more general (neo-)classical orthodoxy.

I consider the idea that Keynes was theorizing about the events of the Great Depression and that *The General Theory* was a work in depression economics as missing the mark by far. The previous section made it clear that Keynes was deeply familiar with the banking crisis that was an essential feature of the Great Depression.

Yet in *The General Theory* Keynes went out of his way to not use the Great Depression as the specific or unique calamity that his theory set out to explain. This is made especially clear by the fact that his *General Theory of Employment, Interest and Money* assumes a constant money stock—an assumption that caused much controversy in and of itself and that, in my view, was widely misunderstood.

Bibow (2009) discusses seven reasons that can explain why Keynes made convenient use of the constant money stock assumption (CMSA) in *The General Theory*—given the core objective of the work to analyze the factors that determine the level of activity at any time.

First, the CMSA serves as an analytical device in Keynes's attack on the quantity theory of money. If a fall in effective demand depresses activity and leads to falling wages and prices, the

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¹⁰ Some also see the Great Depression as a gift to Keynes to achieve eternal fame: "while Keynes did much for the Great Depression, it is no less true that the Great Depression did much for him. It provided challenge, drama, experimental confirmation. He entered it the sort of man who might be expected to embrace The General Theory if it was explained to him. From the previous record one cannot say more. Before it was over, he had emerged with the prize in hand, the system of thought for which he will be remembered" (Paul Samuelson, quoted in Stiglitz[1966]).

classical economists Keynes is rebelling against would simply attribute falling prices to a declining money stock—if there were a decline. By the CMSA, Keynes rules out the traditional quantity-theoretic monetary channel, highlighting instead the role of real demand and money wages in determining the levels of activity and prices, respectively. At the same time, as chapter 19 of *The General Theory* shows, the CMSA allows for the possibility of an alternative channel through which falling money wages may at least indirectly tend to raise activity:

The reduction in the wages-bill, accompanied by some reduction in prices and in money-incomes generally, will diminish the need for cash for income and business purposes; and it will therefore reduce pro tanto the schedule of liquidity-preference for the community as a whole. Cet. par. this will reduce the rate of interest and thus prove favorable to investment. ... It is, therefore, on the effect of a falling wage- and price-level on the demand for money that those who believe in the self-adjusting quality of the economic system must rest the weight of their argument; ... If the quantity of money is itself a function of the wage- und price-level, there is indeed, nothing to hope in this direction. But if the quantity of money is virtually fixed, it is evident that its quantity in terms of wage-units can be indefinitely increased by a sufficient reduction in money-wages. (Keynes 1936, 263–66)

Second, the CSMA may have served some tactical considerations, as Joan Robinson (1970, 82) argues. Some critics of the *Treatise*, foremost amongst them Friedrich Hayek (1931; cf. Keynes 1931r, 249–51), claimed that the disequilibria Keynes analyzes in the *Treatise* must necessarily be the result of the banking system's departure from neutrality. This claim is diametrically opposed to Keynes's objective of showing that disequilibria may just as well originate outside the banking system, whereas the latter may, at least potentially, take on the role of a "balancing factor" (as already was the case in the *Tract*). Perhaps Keynes (1936, 183) was hoping that these critics would accept the CMSA as representing "neutral money," whatever that may be.¹¹

Third, the CMSA simplifies Keynes's analysis in a number of ways. Compared to the rather more complex analysis in the *Treatise*, the CMSA allows Keynes to concentrate on the income-expenditure part (excess-saving factor) while the excess-bearish factor—the element his critics had most difficulties with—is set on "neutral." The part played by liquidity preference is at the same time made even clearer: The rate of interest is established at any time at that level at which

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¹¹ The verdict is that the CMSA was a tactical mistake (cf. Harcourt 1987; Kaldor 1983; Thirlwall 1983; Tobin 1983). Taking a constructive route, Hyman Minsky (1975) developed Keynes's vision of financial capitalism as a world in which asset prices are inherently restless and financial markets endogenously breed instability.

the desire for extra liquidity vanishes at the margin; an attempt to become more liquid changes the rate of interest forthwith. Making allowance for banks' discretion to respond to the public's changed liquidity preferences, which the banks may or may not use, as was the case in the *Treatise*, only complicates the matter. The new truncated excess-bearish version simplifies his analysis without distracting from the essence of his theory of effective demand, namely, that it is spending, and investment spending in particular, that is driving the system.

Forth, while the aim to simplify may have been a goal in itself, the CMSA also helps to bring out another crucial analytical point: it makes clear that, for instance, an increase in the level of economic activity may affect interest rates indirectly simply due to the changing requirements of the industrial circulation (the transactions motive) if the banking system does not duly enlarge the pool of liquidity. Clearly this outcome would have nothing to do with a shortage of saving (Keynes 1938, 231). Rather, it shows that purely monetary factors condition the equilibrium level of real activity. They do so not only at the new higher level of activity (perhaps prompted by a rise in the marginal efficiency of capital), which is sustainable even at higher interest rates, but also at the initial level of economic activity. By implication, there is no unique long-period equilibrium independent of the "banking policy." In short, the CMSA stands for a particular banking policy, which could be different, and in which case the long-period equilibrium would then likely be different, too.

Fifth, since banking policy includes both the policies of the authorities and the banks, the CMSA has pivotal implications for the behavior of banks. If, in a recession, firms manage to adjust their indebtedness to banks roughly in line with their shrinking business, the size of the banks' balance sheets would tend to shrink pari passu. At least this would occur if banks did nothing else but passively accommodated firms' varying working capital requirements. Money would then be endogenous, purely credit demand-driven (and just as the Post-Keynesian "endogenous money" literature is depicting banks). This peculiar type of passive banking would rule out the indirect

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¹² In what appears to be a fragment from his 1932 lecture notes Keynes speaks of a: "large class of possible monetary policies indeed all or most of those in which the total supply of money is not perversely correlated with the demand for money in the active circulation, a perverse correlation in this case being a tendency for the former to change in the same direction as the latter and perhaps at a faster rate" (Keynes 1932h, 55–56). The CMSA stands for any particular banking policy in which "the total supply of money is not perversely correlated" (Cf. also Rymes 1989, 63–77).

effect on interest rates in his own analysis and referred to in the literature as the "Keynes effect" (Cottrell 1994) featuring in the above quote. *The General Theory* features exogenous money due to bank behavior.

The analytical content of the Keynes effect is of great interest. For there is no need to restrict its potential role to the case of changing money wages only. The point is far more general, referring to changes in the size of the pool of liquidity relative to the level of activity and prices, for whatever reason. The *Treatise* features procyclical variations in the requirements of the industrial circulation, the liabilities part of which (i.e., income and business deposits) reappears in *The General Theory* under the heading of the transactions motive for money demand. The corresponding changes on the asset side of the banks' balance sheets are analyzed in detail in the *Treatise* but left implicit in *The General Theory*. The point is that for the stock of money to remain constant when the demand for working capital is falling off, for instance, banks must expand their business activities in other directions. In particular, they may decide to buy more investments, thereby driving down the long-term rate. The CMSA presupposes bank behavior of this sort, whether policy-controlled interest rates are adjusted or not. This purely bank-driven interest rate channel should be more appropriately called the "Keynes mechanism." Analytically speaking, the Keynes mechanism is driven by the banks' profit motive; it presupposes both agile behavior on the part of banks and unchanged liquidity preferences of the general public.

Sixth, the CMSA was not an arbitrary assumption simply made for analytical convenience but had some empirical backing as well; hence ditto for the Keynes mechanism. The liquidity preference theory of bank behavior in the *Treatise* was informed by Keynes's own empirical investigations in that book and his earlier *Tract*. ¹³

Indeed, so long as banks do not get into trouble themselves, what should stop them from investing in alternative directions when their normal clients are getting cold feet?

Treatise) (cf. also Nevin 1955; Nevin and Davis 1970; Feavearyear 1963).

¹³ See table 1 in the annex of Bibow (2009), which summarizes some key features of the period of Keynes's monetary trilogy, showing both the rise in the banks' securities portfolios of the 1930s (in line with his *General Theory*) as well as significant variations in the banks' asset composition (as already observed in the *Tract* and

Which brings us to the seventh and final reason discussed in Bibow (2009)—which is also the most important one for our purposes here: the CMSA underlines and exemplifies the generality of *The General Theory*. *The General Theory* is neither a depression theory nor is it a disaster theory. Clearly a particular banking policy that keeps the money stock constant when the economy hits a recession is not a worst-case scenario. In particular, a nonshrinking money stock is a far cry from US developments during the Great Depression—but in line with what Keynes observed in Britain at the time.¹⁴

The CMSA implies that the banking system is probably not, at least not yet, in major trouble itself. Rather, he refers to what may be considered a more or less neutral banking policy in terms of which Keynes analyzes the potential sources of "automatic relief," and against which the possibility of more aggressive "deliberate action" on the part of the monetary authorities is then compared. Importantly, while policy-controlled interest rates are likely to be reduced in practice, the Keynes mechanism may work for any given stance of monetary policy featuring exogenous money due to bank behavior.

That Keynes saw *The General Theory* as general rather than specifically dealing with depressions and disasters is apparent from other pertinent sections of the work, too. For instance, in chapters 13 and 15, Keynes presents his liquidity preference theory of interest as a replacement for the flawed classical and loanable funds theories of interest. Only one paragraph is reserved for discussing extremes:

The most striking examples of a complete breakdown of stability in the rate of interest, due to the liquidity function flattening out in one direction or the other, have occurred in very abnormal circumstances. In Russia and Central Europe after the war a currency crisis or flight from the currency was experienced, when no one could be induced to retain holdings either of money or of debts on any terms whatever, and even a high and rising rate of interest was unable to keep pace with the marginal efficiency of capital (especially of stocks of liquid goods) under the influence of the expectation of an ever greater fall in the value of money; whilst in the United States at certain dates in 1932 there was a crisis of the opposite kind—

¹⁴ Apart from misinterpreting liquidity preference theory more generally, Leijonhufvud's (1981, 166–67: n. 50) claim about widespread bankruptcies among banks is also far off the mark. As seen above, Keynes was fully aware of contrasting banking developments in the United States and the United Kingdom, where the money supply fell continuously during the deflationary period of 1920 to 1925, and then grew slowly until 1930. After a minor decline in 1931, money grew faster in the United Kingdom for the rest of the '30s (cf. Howson 1975, Friedman and Schwartz 1982.)

a financial crisis or crisis of liquidation, when scarcely anyone could be induced to part with holdings of money on any reasonable terms. (Keynes 1936, 207–8)

Similarly, in chapter 17, where Keynes explores the peculiarities of money that make the money rate of interest "rule the roost," his key observations are general in character: first, the production of modern (bank) money has no direct employment effects but can only operate by influencing financial conditions; whilst, second, the desire for liquidity, which is conditional upon changing circumstances, confidence, and expectations, features money as a "bottomless sink for purchasing power" not only in the extreme case of a "competitive panic to get liquid," but as the factor that shapes the liquidity premium and hence the money rate of interest at any time. Keynes concludes that chapter by repudiating the Wicksellian natural rate concept: "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" (1936, 243).

Due to the discovery of the principle of effective demand, Keynes reaches the conclusion that neoclassical theory is only valid and applicable under conditions of full employment, conditions that represent merely a special case that is not automatically attained through the working of market forces. There is thus no unique long-period position, but a multiplicity of natural rates. Each natural rate, if the market rate accords to it, would keep the level of activity—under given conditions—at some prevailing rate, whatever it may be: "merely the rate of interest which will preserve the status quo" (Keynes 1936, 243). The system cannot be in equilibrium with the market rate being below that natural rate that corresponds to full employment (i.e., the neutral rate). For a state of true inflation would then develop. But the market rate can well be in equilibrium above the neutral rate, and the system would then be stuck in an "unemployment equilibrium"—with downward flexibility of money wages (as analyzed in chapter 19) offering no solution but risking deflation and hence calamitous events as observed during the Great Depression.

Keynes therefore finally provides the theoretical underpinning for his preferred monetary policy first proposed in his *Tract on Monetary Reform*. The authorities should prioritize internal equilibrium: aiming at price stability while stabilizing the business cycle and employment (paired with whatever stability of exchange rates may be achievable through international cooperation and/or within a suitable international monetary order).

The Great Depression certainly informed Keynes's transition from the *Treatise* to *The General Theory* but it was not the special event his new theory is meant to explain. His far more general outlook in making the transition to *The General Theory* is perhaps best captured by his public broadcast of November 1934 titled "Poverty in Plenty: Is the Economic System Self-adjusting?" (Keynes 1934c)—a question that he answers in the negative—as well as his earlier contribution to the Arthur Spiethoff Festschrift of 1933, titled "A Monetary Theory of Production," in which Keynes states that: "The theory which I desiderate would deal, in contradistinction [to the neoclassical approach to money], with an economy in which money plays a part of its own and affects motives and decisions and is, in short, one of the operative factors in the situation, so that the course of events cannot predicted, either in the long period or in the short, without a knowledge of the behavior of money between the first state and the last. And it is this which we ought to mean when we speak of a monetary economy" (Keynes 1933b, 408–9).

All of this raises the puzzling question of how the economics profession ended up with the lasting impression that Keynes's *General Theory* was about the Great Depression, a special theory of depression economics that may be ignored unless another global financial crisis comes around that might call for a—temporary!—dust off.

7. FROM FISHER AND PIGOU TO CHAIRMAN BERNANKE, AND FROM UNCONVENTIONAL MONETARY POLICIES TO THE (RE-)BIRTH OF THE MONETARY THEORY OF INTEREST

The first thing to note here is that Keynes's *General Theory* truly takes a diametrically opposed approach to Irving Fisher's contributions of the time. Fisher's seminal (1933) essay titled "The Debt-Deflation Theory of Great Depressions" is explicitly a special theory meant to explain events of the kind as they unfolded in the US Great Depression.¹⁵

Fisher's (1933) famous "paradox" elaborates on one aspect—the macro repercussions of over-indebtedness and widespread attempts at deleveraging—of what Keynes described in 1932 as a "competitive panic to get liquid." According to Fisher (1933), "the very effort of individuals to lessen their burden of debts increases it, because of mass effect of the stampede to liquidate is swelling each dollar owed. Then we have the great paradox which, I submit, is the chief secret of most, if not all great depressions: The more the debtors pay, the more they owe." While Fisher's paradox deserves highlighting, arguably, Fisher's analysis of banking in this context, following crude quantity-theoretic lines of thought, is inferior to Keynes's more elaborate evaluation. ¹⁶

There is no doubt, however, that Fisher's insightful thoughts on debt deflation compare highly favorably with the more influential reaction to Keynes's *General Theory* that started with Arthur Pigou and became known as the "Pigou effect" (or "real balance effect," see Patinkin [1958]). I will not waste any time here on the lunacy that Keynes in 1944 rightfully described as an idea that was "really too fantastic for words and scarcely worth discussing" (quoted in Patinkin 1982).¹⁷

¹⁵ See also Fisher (1932) and chapter 7 titled "Booms and Depressions" in Fisher (1935). See Dimand (1994, 1995) and Pavanelli (2003).

¹⁶ Fisher's (1933) policy prescriptions also seem to follow naïve quantity-theoretic ideas: "it is always economically possible to stop or prevent such a depression simply by reflating the price level up to the average level at which outstanding debts were contracted by existing debtors and assumed by existing creditors."

¹⁷ Greenwald and Stiglitz (1993, 36) put it mildly when they remark: "The enormous attention the real balance effect has received over the years hardly speaks well for the profession" (cf. Tobin 1980).

Political opportunism convinced Milton Friedman to loudly proclaim that the real balance "effect" had proved Keynes theoretically wrong (Friedman 1968, 1971)¹⁸—whilst quietly acknowledging that: "There is much dispute about the empirical importance of this effect. I personally regard it as minor" (Friedman (1997, 16). It is more than strange that the figurehead of monetarism and author of "A Monetary History of the United States" (jointly authored with Anna Schwartz) should praise the theoretical usefulness of a model in which deflation is a stabilizing force. Friedman and Schwartz (1963) influentially blamed the Great Depression and widespread bank failures occurring as part of the sharp decline in the money stock in the United States on the Federal Reserve. The Fed was at fault for permitting deflation to happen—but somehow, at least in some model (supposedly a model that does not feature a banking system) deflation can stabilize employment.

Friedman (1968, 3) also argued that Keynes was wrong in denying that monetary policy was very powerful when the Federal Reserve's blunder in the Great Depression would prove, in his view, how very powerful the central bank really is: "the U.S. monetary authorities followed highly deflationary policies. The quantity of money in the U.S. fell by one-third in the course of the contraction. ... It fell because the Federal Reserve System forced or permitted a sharp reduction in the monetary base, because it failed to exercise the responsibilities assigned to it in the Federal Reserve Act to provide liquidity to the banking system. The Great Contraction is tragic testimony to the power of monetary policy – not, as Keynes and so many of his contemporaries believed, evidence of its impotence."

It is all too obvious that Friedman is punching a boogie man here. For Keynes, too, condemned the monetary authorities for allowing the calamity to unfold (although his diagnosis is somewhat more complex in also highlighting the role of the international monetary system). What Keynes questioned was the effectiveness of monetary policy once the situation had deteriorated to the degree it had in the early 1930s. Under such conditions, debt-financed public investment had to come to the rescue, in Keynes's view. He considered the New Deal and the Fed's accompanying

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¹⁸ "These theoretical developments ... did undermine Keynes's key theoretical proposition, namely, that even in a world of flexible prices, a position of equilibrium at full employment might not exist. Henceforth, unemployment had again to be explained by rigidities or imperfections, not as natural outcome of a fully operative market process" (Friedman 1968, 2–3).

measures as too timid to restore full employment. Of course, Keynes was proven right by events: while Hitler's Autobahn building and rearmament efforts brought full employment to Nazi Germany, it took WWII to restore full employment in the United States (Brown 1956; Romer 1992). Keynes (1940, 158) observed: "It seems politically impossible for a capitalistic democracy to organize expenditures on the scale necessary to make the grand experiment which would prove my case—except in war conditions."

It is largely a waste of time to even discuss the peculiar twists and turns that took mainstream macroeconomic thought from Friedman's monetarism to modern "New Keynesian" dynamic stochastic general equilibrium (DSGE) modeling exercises (Romer 2016; Rogers 2018a, 2018b; Stiglitz 2018). Willem Buiter (who I wish had acted upon this verdict when I attended his advanced macroeconomics course at Cambridge in 1994) summarizes the outcome quite aptly: "Indeed, the typical graduate macroeconomics and monetary economics training received at Anglo-American universities during the past 30 years or so, may have set back by decades serious investigations of aggregate economic behavior and economic policy-relevant understanding. It was a privately and socially costly waste of time and other resources" (Buiter 2009).

Which leads me to Bernanke as the New Keynesian central banker who had to put it all into action when the global financial crisis struck nearly 80 years after the Great Depression.

As a conservative neoclassical economist, Bernanke was probably predisposed to fall for Friedman's monetarism. Yet his own research on the Great Depression taught him that there was somewhat more to the calamity than what the quantity theory à la Friedman (and Schwartz) was able to reveal. His article titled "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression" (Bernanke 1983) and other related works (Bernanke 1995, 2004; Bernanke and Gertler 1990, 1995; Bernanke, Gertler, and Gilchrist 1999) highlight how a broken financial system can amplify the real effects of deflation. Interestingly, the "financial accelerator" hypothesis emphasizes balance-sheet effects and the role of collateral and runs broadly along the lines of Keynes's argument about margins that had run off and that were, at first, curtailing lending and, when things got nasty, part of the forces driving the general

competitive panic for liquidity that risked collapsing the financial system and pushing the economy deeper into depression along with it.

In the early 2000s, Bernanke (2002a, 2003) had advised the Bank of Japan on how to experiment with unconventional monetary policies to fight Japan's (mild) deflation with expansionary fiscal policy fully "monetized" by the central bank—advice that earned him the title "Helicopter Ben." In 2008 and subsequent years, Chairman Bernanke got his own shot at unconventional monetary policies when he stood at the helm of the US Federal Reserve.

It is beyond the scope of this paper to fully assess who should get the credit for taking aggressive central bank action in the modern crisis: Bagehot, Fisher, Keynes, or Friedman. Before the fact, Bernanke himself seemed to favor Friedman, declaring on the occasion of Friedman's 90th birthday: "Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again" (Bernanke 2002b). Interestingly, Bernanke also observed that quantitative easing (QE) does not work in theory, although it does seem to work in practice (see Berkowitz 2014)—an observation that begs the question which theory was being consulted regarding QE (and Bernanke seems to imply it was monetarism).

In my view, the prize for the immediate lending of last resort response in the panic has to go to Walter Bagehot (1873; perhaps tied with Henry Thornton [1802]). As to the effectiveness of QE, Keynes "would have told you so." Keynes already recommended open-market purchases of long-term securities à outrance (to the point of liquidity saturation) in his *Treatise*, when he still held on to the Wicksellian natural rate concept. In his *General Theory*, the liquidity preference theory of interest replaced any remnants of the loanable funds theory in his thinking. In particular, the interest rate was no longer uniquely anchored by those infamous "real forces of productivity and thrift" but was now presented as a purely monetary phenomenon. Financial conditions as determined in the financial system under the guidance of the monetary authority shape our economic realities. The monetary theory of production Keynes described in his Spiethoff Festschrift in 1933 had arrived.

¹⁹ Mehrling (2011) offers a lucid account of the modern expansion of the Bagehot principle to include "market making of last resort"; see also Goodhart (1999) and Goodhart and Illing (2002).

It has still not arrived for today's "New Keynesians" (including Bernanke) and not to mention the real business cycle theory hardcore who remain puzzled why QE seems to work in practice. Policy practice has changed, but theory hasn't. Modern central banks do not fly by autopilot, as Friedman wished. They apply discretion—but their navigation system lacks sound theoretical foundations. New Keynesians are essentially neo-Wicksellians (Woodford 2003) and firm believers in the loanable funds theory (which was diagnosed as flawed by Keynes). Sharing loanable funds beliefs with Friedman and the neoclassical mainstream in general, Bernanke (2005) made his loanable funds credentials very clear in his famous "global saving glut" hypothesis, featuring the age-old vision of "saving financing investment" in a global setting.

We owe it to researchers at the Bank for International Settlements (BIS) (Claudio Borio in particular) that the loanable funds theory is being questioned today in official central banking circles; a critique that will hopefully finally reach at least some academic economists, too. Borio and Disyatat (2011) reject the flawed reasoning that informs the global saving glut hypothesis compellingly. In a recent paper, extending earlier BIS research on the notion of a "financial cycle" (Drehmann, Borio, and Tsatsaronis 2012; Borio 2014; Juselius et al. 2017; Rungcharoenkitkul, Borio, and Disyatat 2019a) driven by monetary policy and financial factors, Rungcharoenkitkul, Borio, and Disyatat (2019b) present a model of a finance-based economy in which there is no well-defined natural rate of interest to which the economy gravitates. Monetary policy is nonneutral, as the policy interest rate anchors the real economy. Their theorizing has a distinct Austrian flavor in focusing on risks of imbalances building up owing to excessively easy monetary policies, but they do acknowledge Keynes as the source of their proposed *monetary* theory of interest. Featuring credit-creating banks but no bond market, their theory is essentially a monetary policy theory of interest that bears some resemblance to the Post-Keynesian endogenous money theories of monetary policy and banking (Moore 1988). The BIS researchers bolster the destructive part of Keynes's critique—the rejection of loanable funds theory—and make an important step towards embracing its constructive part: liquidity preference theory.

We may have come full circle (sort of) just in time before the next big financial crisis strikes. Will it take another major calamity to finally alert the macroeconomics mainstream to the fact that Keynes's *General Theory* is not merely of relevance when the house is burning?

8. CONCLUSION

Following the Rome conference theme, "Financial instability, market disruptions and macroeconomics: lessons from economic history and the history of economic thought," this contribution examines Keynes's writings from 1913 until 1936 to distill his evolving views on financial instability. A special focus is on Keynes's assessments and writings during the Great Depression, illuminating the common (mis-)interpretation of *The General Theory* as depression economics.

Keynes showed keen concerns for financial instabilities in his early monetary work, *Indian Currency and Finance*. Regarding Indian banking he emphasized its early stage of development, regulation, and the absence of a central bank as potential sources of vulnerability. From early on, Keynes appreciated the importance of a central bank and firmly upheld the Bagehot principle (Keynes 1926b). In *Economic Consequences of the Peace*, international debtor-creditor relationships (and global imbalances) then took center stage. While his *Tract on Monetary Reform* emphasized price stability as vitally important and investigated the wreckage caused by inflations and deflations, the book is quiet on financial structure. Similarly, his *Treatise on Money* is strong on details of financial structure and bank behavior, but the book is a work on (normal) business cycles rather than crisis economics. In many ways, *The General Theory* is even more down to basics, focusing squarely on what determines the level of employment at any time, while financial institutional detail and bank behavior is largely left working quietly behind the scenes.

It is his writings from the early 1930s, especially those related to his American visit in 1931 and German visit in 1932, that provide clear evidence of Keynes's deep understanding of the banking and financial troubles existing at the time. Based on his explorations into bank money and bank behavior in the *Treatise*, Keynes exposed a clear grasp of how debt, banking, and deflation interact in a (global) "competitive panic for liquidity" that can wreck the financial structure and much else besides.

These calamities were part of the background that informed Keynes's theorizing as he was traveling toward his final major monetary work: *The General Theory*. That all around deflation is very unlikely to stabilize economies equipped with a banking system was made all too obvious to miss at the time by unfolding events. That actions that can be rational and effective when practiced by individual actors or small units may turn viciously destabilizing when followed universally informs the new macroeconomics of *The General Theory*.

But the work does not specifically aim at explaining the Great Depression (or comparable disasters). *The General Theory* is not an exercise in depression economics. Very far from it. Its aim is to explain the normal functioning of "monetary production economies," i.e., the world we actually live in rather than the fictitious "real economies" that the neoclassical mainstream is still preoccupied with today. The scenario of a "competitive panic for liquidity" represents only an extreme possibility in liquidity preference theory. The theory concerns the general insight that financial conditions as determined in the financial system under the guidance of the monetary authority are shaping economic realities—rather than any real forces providing uniquely determined anchors for the system, with finance as a mere reflection of that economic reality.

Even today, more than 80 years later, the neoclassical mainstream has still not grasped what monetary economics should really be about—the task Keynes set himself in his 1933 Spiethoff Festschrift contribution. Policy practice has changed, specifically in that the response to the crisis of 2007–9 was very different from the response to the Great Depression, but theory hasn't. It would appear, then, that modern policy practice is lacking sound theoretical foundations. But there may be a glimmer of hope for progress in Basle at the international bank that Keynes at Bretton Woods (Steil 2013) saved from closure.

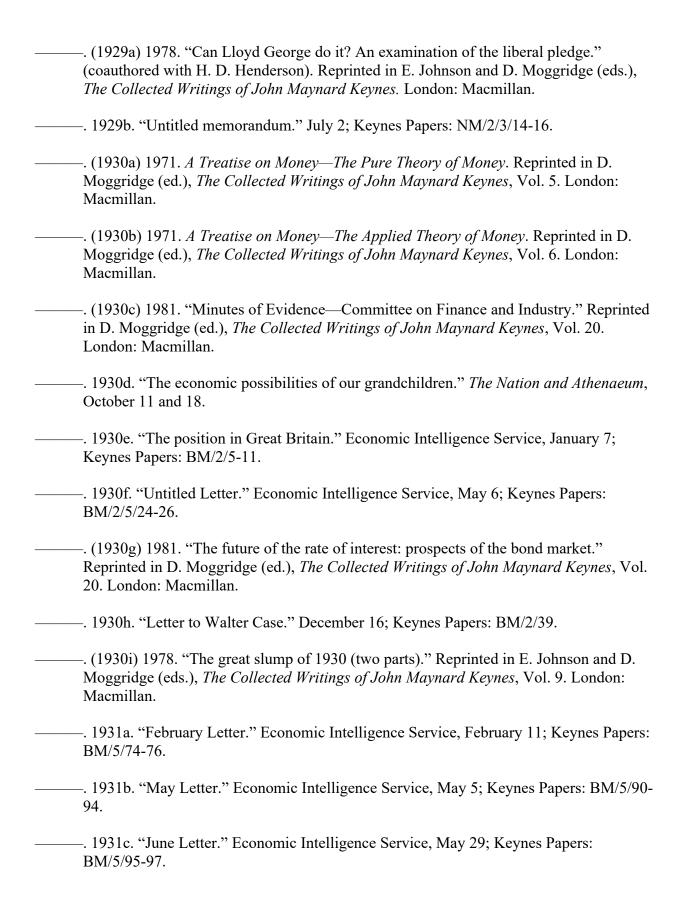
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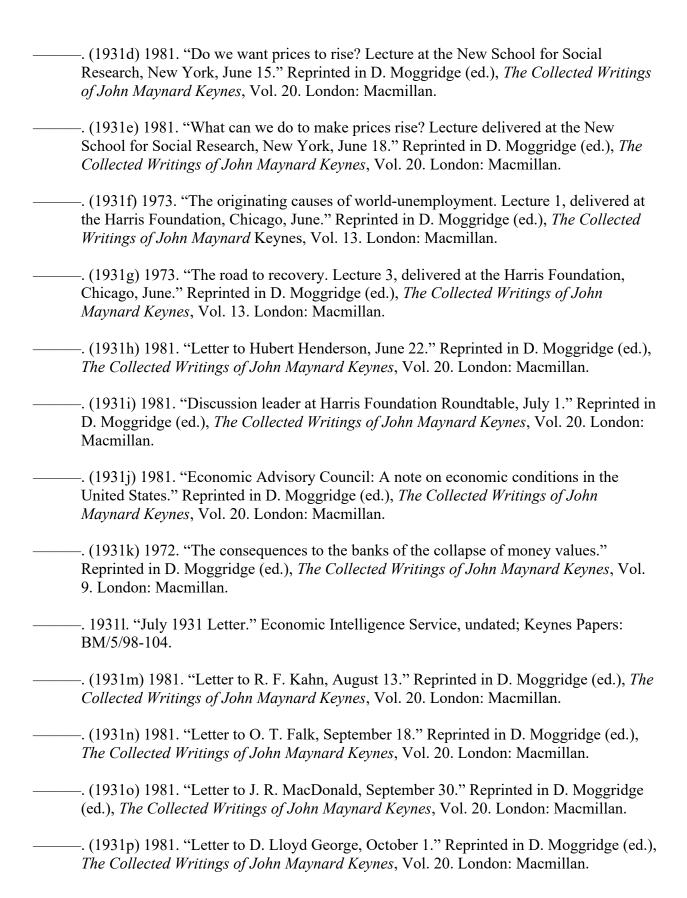
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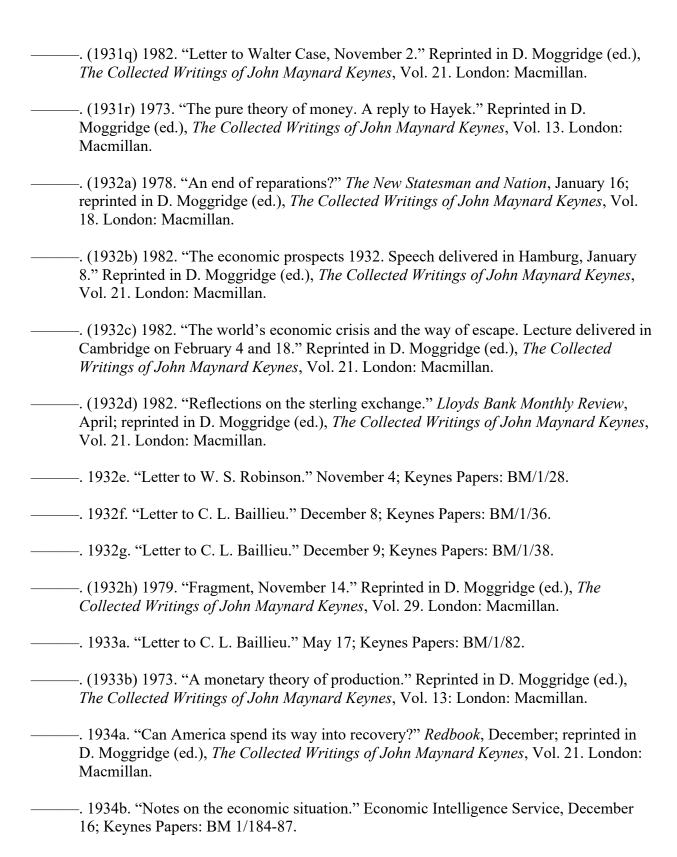
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