

"Unusual, Unstable, Complicated, Unreliable and Temporary" Reinterpreting the Ebb and Flow of Globalization

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In 1919, John Maynard Keynes wrote his famous tract, The Economic Consequences of the Peace. In that work he anticipated the collapse of the first era of globalization that began in the mid nineteenth century. He admonished the short-sighted assumption that these years of relative peace and prosperity for many was a permanent norm, interrupted only briefly by the Great War. The diplomatic failures, lapses in leadership and promotion of narrow interests and vision outlined by Keynes underpinned his prediction of a backlash of economic nationalism, trade protectionism and recession.

The paper revisits the turning points in the evolution of the global economic system since 1919 by focusing primarily on the evolution of the international monetary system and policy cooperation/coordination. We identify four disruptions and examine how each prompted change in the underlying ideology about how the international monetary system should be organized: World War I, Bretton Woods, the Managed Float, and the 2007-2008 global financial crisis. Each turning point was characterized by different forms and institutions of cooperation, how rules (either explicit or implicit) were designed and implemented, and the crucial importance of the historical context.

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'Unusual, Unstable, Complicated, Unreliable and Temporary' Reinterpreting the Ebb and Flow of Globalization¹

"The power to become habituated to his surroundings is a marked characteristic of mankind. Very few of us realize with conviction the intensely unusual, unstable, complicated, unreliable, temporary nature of the economic organization by which Western Europe has lived for the last half century. We assume some of the most peculiar and temporary of our late advantages as natural, permanent, and to be depended on, and we lay our plans accordingly." (Keynes 1919)

1. Introduction

The opening sentences of Keynes' influential 1919 *cri de Coeur,* The Economic Consequences of the Peace, anticipated the collapse of the structures of the international economy that had prevailed from the later 19th century. Unprecedented flows of people, goods and capital to a wide geographical area during the first era of globalisation had created expectations of growth and emphasized the importance of open international economic relations for creating that growth and opportunity. Keynes admonished the short-sighted assumption that these years of relative peace and economic prosperity for many was a permanent norm, interrupted only briefly by the Great War. He foresaw in the Versailles Treaty the suspension of globalisation as more prolonged or even perhaps permanent. Keynes was writing at the defining moment of the 20th century, in the middle of what came to be viewed by some as a 30-year war. The diplomatic failures, lapses in leadership and promotion of narrow interests and vision outlined by Keynes in the *Economic Consequences of the Peace* underpinned his predictions of a backlash of economic nationalism, trade protectionism and recession.

¹ For helpful comments we thank Harold James, Chris Meissner and Robert McCauley.

This paper revisits the turning points in the evolution of the global economic system in the century since 1919 by focussing primarily on the evolution of the international monetary system and policy cooperation/coordination. While there is but a fleeting reference to the international monetary system in Keynes' 1919 treatise, this focus is justified by how Keynes interacted with the ensuing efforts to restore the pre-war system that he criticises in Consequences of the Peace. In particular, this includes his 1925 sequel, *The Economic* Consequences of Mr. Churchill and his direct role in the design of the post-1945 international monetary system. We identify four disruptions and examine how each prompted changes in the underlying ideology about how the international monetary system should be organised. First, the eruption of the First World War confirmed the end of the First Globalisation. Second, the Second World War prompted the creation of a new managed system at Bretton Woods. The third turning point was in the 1970s when the Bretton Woods consensus finally gave way to a new non-system dominated by floating exchange rates for the major world currencies and heralded the acceleration of financial integration of global markets. The final turning point is the 2007-8 global financial crisis, which has provoked an echo of the threats that Keynes identified for the global economy in 1919. Each turning point was characterised by different forms and motivation of cooperation, how rules (either implicit or explicit) were designed and implemented, and the crucial importance of the historical context. Finally, the paper explores how the dominant interpretations of the past shaped policy reactions in the present and concludes with some lessons for today.

2. The First Turning Point: World War I and the End of the First Era of Globalization

2.1 The First Era of Globalization

John M. Keynes in *The Economic Consequences of the Peace* (1919) started his book with an oft quoted description of the world before World War I began as the apogee of the first great era of globalization. It set the stage for the disaster that followed and his pessimistic view of how the global political and economic order would fare after the war.

"What an extraordinary episode... the internationalization of which was nearly complete in practice ... The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their respective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. ... But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable. The projects and politics of militarism and imperialism, of racial and cultural rivalries, of monopolies, restrictions and exclusion, which were to play the serpent in this paradise, were little more than the amusements of his daily newspaper, and appeared to exercise almost no influence at all on the ordinary course of social and economic life, the internationalization of which was nearly complete in practice." (pages 4-5)

The guns of August put a halt to the amazing expansion of global trade, finance and migration that transformed the global economy from the mid nineteenth century until the outbreak of war. To provide some back drop to the hurdles that Keynes believed needed to be overcome after the war we briefly describe the progress that had been made, reflecting Keynes' description in his Chapter II.

The growth of trade relative to population and income began in earnest in the early nineteenth century. It was driven by technological change which vastly reduced the costs of shipping goods (the steamship and railroads), a reduction in tariffs and political stability (The Treaty of Vienna and Pax Britannica) (Bordo 2017). Empirical evidence for global trade integration comes in two dimensions: a) the growth of trade relative to income; b) convergence in the price of traded

commodities (Findlay and O'Rourke 2004). On both dimensions, although the process of international integration began with the age of European exploration in the sixteenth century, the major thrust in globalization did not really occur until after the Napoleonic Wars. The growth of trade from 1500 to 1800 averaged a little over one per cent per year, while population grew by 0.25 per cent. Between 1815 and 1914 trade measured by exports grew by 3.5 per cent per year versus income growth of 2.7 per cent (Findlay and O'Rourke 2004). Commodity prices also converged dramatically in the nineteenth century. For example, because of a sharp decline in transportation costs (steamships and railroads, Suez and Panama Canals) the price of wheat in Liverpool relative to that in Chicago fell from 58% in 1870 to 16% in 1913 (Findlay and O'Rourke 2004). In addition to falling transport costs, globalization was spread by reductions in tariff protection, beginning with Britain's reduction of the corn tariffs after the Napoleonic Wars, culminating in their repeal in 1846. The trend towards free trade spread across Europe in a series of reciprocal agreements beginning with the Cobden Chevalier Treaty in 1860 between Great Britain and France. Within the next two decades virtually all of Europe reduced tariffs (to the 10-15% range from 35%) in a series of bilateral agreements incorporating Most Favored Nation clauses.

Financial market integration also accelerated between 1870 and 1914. As in the case of goods trade, there was a long period of innovation underlying the dramatic increase in financial integration in the 19th century. Many of the instruments of international finance such as the bill of exchange were invented in Italy in the middle ages and were perfected in Amsterdam in the seventeenth century (Goetzmann 2016). London succeeded Amsterdam as the key center of international finance by the nineteenth century after wars reduced the Dutch economic

reach. Obstfeld and Taylor (2004) portray the first era of financial globalization in the nineteenth century, as centered in London, with the other advanced Western European countries as participants. Capital flowed from the mature economies of Western Europe which had by then gone through the industrial revolution and had reduced the marginal product of capital (real rate of return) to the countries of European settlement which had abundant resources and higher real returns (Bordo 2002). The stock of global foreign assets relative to world GDP reached a peak of 20% in 1913 and were not surpassed again until late in the twentieth century (Obstfeld and Taylor 2004). The British held the dominant share of overseas investments in 1914 at 57%, then France at 22 %, Germany 17% and the Netherlands at 3% (Obstfeld and Taylor 2004). These claims financed up to half of the capital stock of Argentina and 20% for Canada and Australia (Obstfeld and Taylor 2004). Net capital outflows reached a peak of 9% of GDP for Great Britain just before World War I (Obstfeld and Taylor 2004). The key factors that fostered the rapid development of global finance were technological change (the telegraph and the transatlantic cable which was first laid between Britain and North America in 1866 starting a network still used today) and the classical gold standard with London at the center.

Adherence to gold convertibility by the major nations of the world ensured stable exchange rates and acted as a commitment mechanism or a "good housekeeping seal of approval" for countries seeking access to the London capital market (Bordo and Rockoff 1996). The key rule of the gold standard was that each country would define its national currency as a fixed weight of gold and would not restrict flows of gold across borders. This both ensured fixed exchange rates and provided a nominal anchor and guaranteed the long —term stability of contracts (Bordo and Kydland 1995). Countries that successfully adhered to gold convertibility

attained credibility (Bordo and Siklos 2015). In a stylized version, the gold standard assured smooth international adjustment via the price specie flow mechanism aided by short-term capital flows. More practically, some central banks adhered (but many did not) to what Keynes (1930) called the "rules of the game"—to use their policy tools to speed up the adjustment mechanism. In terms of the modern open economy trilemma (Obstfeld and Taylor 2004) the gold standard encompassed fixed exchange rates, an open capital account but sharply limited monetary (and fiscal) policy independence.

Although integration of trade and capital markets dominate economic historians' explanations of the first globalization, the first characteristic that Keynes used to describe the pre-war European situation in *The Economic Consequences of the Peace* was international migration (Chapter II). Like global commodity markets and capital flows, international migration surged in the nineteenth century and declined after World War I. In a very general way the long-distance transatlantic movement of people can be described as going through three overlapping stages: 1600-1790 slaves and contract labor; 1790 -1850 more predominantly free settlers; 1850-1914 mass migration, first from Northern Europe and then increasingly from Southern and Eastern Europe (Fogleman 1998). From 1600-1860, an estimated 9-11 million enslaved people from Africa were brought to Europe, South America, the Caribbean and American plantations (Eltis and Richardson 1997).² In the case of mass migration from the 1840s primarily to the U.S., Canada, Australia and Argentina, 300,000 people per year moved between 1850 and 1880; 600,000 between 1800 and 1900; and over a million per year between

² Bringing slaves from Africa into the Southern US and into Great Britain became illegal in 1807. The movement of slaves from Africa to Brazil and Cuba continued to the 1860s. Some estimates are as high as 12 million people but the total population that was moved in this way is not fully confirmed.

1900 and 1910. These rates of migration have not been surpassed in the recent era of mass migration; in the 1990s immigration into the US was only one-third of the rate in 1900 measured relative to the host population (Hatton and Williamson 2005). In addition to the trans-Atlantic route, vast migrations across Southeast Asia from China and India served merchant trade and primary production (McKeown 2010). Migrants from these territories also populated the British Colonies and Western shores of North America building infrastructure, particularly the railroad in Canada and the USA that connected the raw material-rich interiors of these continents to markets in Europe. The railroads also encouraged migration, making settlement easier and more profitable for farmers in the great plains of North America as well as creating regional markets for manufactures. In this way investment in infrastructure (often financed in the bond market of the City of London), trade and migration were mutually reinforcing factors in the first globalization.

2.2 The End of the First Era of Globalisation

In retrospect, Keynes' 1919 description of the gold standard era as 'unusual, unstable, complicated, unreliable and temporary' seems remarkably perceptive. The system worked best for countries (like Britain) at its core and it was supported by the geographic breadth of the British empire and by the persistence of Britain's open trade policy despite rising protectionism in Europe and the North America. Already by the end of the 19th century restrictions on trade and migration were undermining the key sources of economic prosperity of the 'golden age' of the first globalization. This retreat from globalization was accompanied by rising political and strategic hostility in Europe that brought an abrupt end to this period of relative global

prosperity. In 1914 the first era of globalization crashed to a close with World War I and then the Great Depression but many of the seeds of its destruction were planted beforehand. In turn, globalization may have contributed to the wave of nationalism that led to World War I and even the second part of the Thirty Years war (Temin 1989). O'Rourke and Williamson (1999) argued that the process of globalization planted the seeds of its own destruction (see also James 2002) through the convergence of prices and wages that challenged incumbents.

The consequences of trade and factor mobility in the Golden Age was the convergence of real wages and per capita real income between the core countries of Western Europe and much of the periphery. According to Williamson (1996), this reflected the operation of classical trade theory. Both factors flow and goods flows fostered factor price equalization. Most of the convergence in real wages (70%) is explained by factor movements, especially by labor mobility, (with mobile capital a minor player); the rest (30%) by international trade according to the Heckscher –Ohlin theorem.

These forces had important effects on the distribution of income. In the land-scarce, labour abundant countries of Europe, the mass migrations from 1870 to 1914 reduced the returns to land-owners but eased the pressure on wages and living standards of the general population. At the same time immigration threatened to worsen the income distribution for unskilled workers in countries of recent European settlement, as immigrants competed with established workers for jobs in certain sectors. A political backlash ensued in each region, particularly as rates of growth slowed in the 1890s. In Europe, landowners in France and Germany successfully lobbied for increased tariff protection of agriculture in the last two decades of the nineteenth

century (e.g. the Meline tariff in France in 1882 and the Bismarck tariff in Germany in 1879). In regions of European settlement, new barriers were imposed on immigration.

By the end of the century, the era of mass migration gave way to a wave of restrictions on the movement of people. The May 1882 US Chinese Exclusion Act was the culmination of decades of social and political lobbying against Chinese immigrants, in particular. Soon afterwards, the US Immigration Act of August 1882 introduced the concept of 'inadmissible aliens' who were deemed to undermine the living standards of previous, mainly white, migrants. At the end of 1901, Australia, with a much shorter history of immigration than the US, passed its own Immigration Restriction Act aimed at stopping non-white immigration.³ The political and social limits to globalization through migration had therefore already been reached in the decades before 1914. The most potent symbol of the era of mass migration, the Statue of Liberty in New York harbour, was finally completed in 1886, four years after the immigration back-lash made it into the US law book. Emma Lazarus' poem referring to the 'huddled masses' welcomed by the US (written in 1886 *after* the Immigration Act) was added in 1901. In many ways the Statue of Liberty marked a symbolic end of an era rather than a celebration of the enduring spirit of migration building the American state.

Financial globalization also experienced a backlash. Open capital accounts were associated with private investment booms and busts leading to financial crises (both currency and banking crises). Capital flowed from the capital rich countries of Western Europe to the capital scarce countries across the Atlantic in North and South America or to former colonies, mainly in Australasia or Eastern Europe. But many lacked the institutional development to fully convert

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³ Other countries introduced similar restrictions after 1919.

the new funds into productive investments and hence the capital inflow fueled asset price booms (Bordo and Meissner 2017). In the absence of central banks (e.g. in the US, Canada, Australia) or in the case of countries which had them but were unable to adhere to the gold standard (in Southern Europe, Latin America) currency crises and banking panics could lead to severe economic distress and sovereign debt crises. Moreover, under the classical gold standard, the world price level went through long swings of deflation and inflation reflecting the growth of the real economy relative to the glacially slow growing world gold stock. Gold shortages (deflation) would ultimately, via the Commodity Theory of Money, lead to technical innovation in gold mining and new discoveries (Bordo 1981, Rockoff 1984). But the timing of these events were adventitious (Keynes 1925) rather than synchronized with the needs of the global economy. In the US and elsewhere the Great Deflation of 1873 to 1896 led to a populist outcry against gold and in favor of free silver and bimetallism (Eichengreen 2018).

The first era of globalization and the gold standard that underpinned it, were clearly complex and unstable and already appeared temporary to Keynes by 1919. But this was a view that did not gain traction among policy-makers. They sought to return to the relatively rapid growth of the mid-late 19th century by recreating the stable exchange rates and gold anchor after 1919. There was less public or political enthusiasm, however, for the free trade, open capital markets and migration that had been fundamental to the early successes of this era.

2.3 The First World War

The eruption of the First World War in 1914 confirmed the end of the first era of globalization.

Virtually all countries left the gold standard *de jure* or *de facto* once Britain suspended

convertibility of sterling to gold after the financial crisis in 1914 (Roberts 2013). The British and other belligerents sold most of their outstanding investments in the US (and other emerging countries) to pay for the war (Silber 2007). Both exchange controls and capital controls were widely imposed (Eichengreen 1992). Free trade turned into managed trade and tariffs were raised further (e.g. the Fordney McCumber Act in the US in 1922). Free long-distance migration all but ceased. Moreover, the balance of economic power was permanently shifted from the UK to the US as leading global creditor, which posed huge political challenges for an American population distant from the hostilities that had ravaged Europe and living in a country built on a sense of individual and national ambition above internationalism. As Keynes emphasized, the potential to restore what appeared to be 'normal' conditions of open trade and payments after the war was further hampered by the way the war was financed through the accumulation of debt among allied nations that depended on reparations from the defeated powers to be repaid.

Once the war ended the challenge for the world was to restore political and economic order.

As Keynes posited, The Treaty of Versailles made this difficult to do because it encouraged economic nationalism, political instability and economic uncertainty. It took four years of continuous civil strife, the Bolshevik Revolution and hyperinflation in the defeated powers before new international monetary arrangements were settled upon.

The interwar gold standard was a more deliberately constructed system arising from a series of international congresses in Europe after 1919 (Lausanne 1920, Genoa 1922, Tripartite Agreement 1936). The need for cooperation was increasingly recognized as the German economy floundered, the Bolshevik Revolution brought a violent end to the Russian empire

(despite close links to European royal houses), and war debts strained the global financial system. The ambitious League of Nations provided a bureaucratic locus for gathering intelligence, identifying problems and seeking cooperative solutions, but the lack of engagement by the US administration was a major handicap to its effectiveness in promoting international cooperation despite the passionate efforts of many of the bureaucrats in the League's Economic and Financial Organisation (Clavin 2013). Ultimately, the ambitions of the League and the absorption of financial and intellectual resources did not deliver its aims in the face of political resistance to coordination. Schisms within the League led to the creation of the Bank for International Settlements in 1931 as an alternative venue for European central bank cooperation (Toniolo 2009). Nevertheless, there were some lasting legacies, including new central banks in a range of emerging market economies in South America and Australasia, which were set up based on the British (Niemeier) or US (Kemmerer) models to help to manage the international monetary system (Singleton 2011). The bureaucrats and researchers also formed a cohort that re-emerged in the post-1945 era to rebuild international economic relations (e.g. Jean Monnet, Jacques Pollak, Robert Triffin) and left an intellectual legacy that Pauly (1996) argued foreshadowed the Bretton Woods institutions.

As in the pre-war gold standard, a direct and tangible link to gold by holding large gold reserves was out of reach for most countries. In the pre-war period, this challenge had been partly overcome by the prevalent use of sterling as the dominant global currency and trust in the ability of the Bank of England to sustain the gold value of the pound. After the War, this could no longer be assumed. The interwar system formally accepted the use of sterling and the dollar (and to a lesser extent the franc) as foreign exchange reserves in a gold exchange

standard, but faith in the ability of the Bank of England to protect the parity was ephemeral.

The US Federal Reserve made a short-lived effort to promote the dollar as the key international currency (Eichengreen and Flandreau, 2009) after successfully returning to the gold standard in 1919 at the pre-war parity, but sterling remained the main currency of settlement and unit of account for international trade.

In the end, the interwar gold exchange standard also proved "unstable, temporary and unreliable". Nominal exchange rate pegs that did not reflect underlying economic realities or relative price competitiveness and became caught in the turmoil of the interwar tangle of war debts and reparations. Thus France returned to gold at a greatly undervalued parity with a central bank law that sterilized gold flows, drawing gold from the rest of the world (Moure, 1996), while Britain returned to sterling at an exchange rate that Keynes considered damagingly overvalued (Keynes, 1925). The weakness of the British economy (and therefore sterling) and the inability to resolve the war debts-reparations tangle created by the Treaty of Versailles brought the unstable and fragile system crashing down in 1931. This time even Britain abandoned free trade and the world lurched into economic nationalism. For Britain, this concept of nationalism extended to the Empire, which sustained global trade for many developing economies through imperial preference. But the depression in agricultural prices and protectionism elsewhere created a downward spiral of trade that left no country untouched (Kindleberger 1975). The unresolved peace settlement of 1919 was exposed, as economic nationalism fed into political populism and the renewal of hostilities in 1939. Within months of the onset of World War II, the next phase of international economic cooperation was underway in bilateral negotiations between Britain and the US over the next post-war settlement.

Section 3. The Second Turning Point: World War II and the Bretton Woods System

The complex multilateral structures of the League of Nations and the technocratic turn in economic diplomacy found their echoes in the planning during World War II for a postwar international economic system. Both the US and UK sought to establish more powerful collective institutions that would have the financial as well as bureaucratic resources to govern the new multilateral global economy. By this time, the predictions in Keynes' 1919 treatise seemed to have come true, except for his claim that Britain would remain immune and separate from the devastating impact on the European continent. The prevalence of unemployment, political extremism and nationalism that characterised the 1930s were the main targets for postwar planners (Arndt, 1944). In West European states these imperatives led to elaborate welfare states that required substantial public funding and taxation and strengthened the nation state (Milward, 1999). On both sides of the Atlantic there was also a commitment to integrate Germany back into the European economy to ensure a more sustained recovery for both Germany and its European trading partners.

What followed was a high era of international economic cooperation designed to overcome the failures of the inter-war period. The Cold War of course circumscribed the extent of this cooperation, but also made it more urgent among the capitalist western powers, first as a defence against creeping communism and then later as evidence of the success of the capitalist

system vis-à-vis the communist system of the Eastern Bloc. As in the classic gold standard era, for most of the participants the international monetary system from 1950-1970 experienced rising incomes, economic growth, and a rapid increase in international trade, particularly in manufactures. But, like Keynes' verdict on the 19th century globalisation, this era of relative exchange rate stability also proved "unusual, unstable, complicated, unreliable and temporary". These characteristics arose from flaws in the structure of the international monetary system designed in the 1940s for an imagined restoration of the global order that did not in the end emerge after 1945.

There were three main points of consensus among planners for the post-war. First, ambitious plans were made for a carefully managed global monetary system by planners who still assumed that stable exchange rates for convertible currencies were needed to allow the maximum gains from multilateral trade. The second area of consensus was in the faith in freer trade to promote growth and employment as well as sustaining a more lasting peace. Finally, after the financial crises of the 1930s there was distrust of short term capital flows as destabilising influences that would undermine stable exchange rates. These areas of consensus were recognised in particular by Keynes and reflected in his early writings on the organisation of the international monetary system such as *The Economic Consequences of Mr. Churchill* (1925).

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⁴ Although Keynes (1933) had been quite protectionist.

⁵ Gottfiried Haberler made an early case for floating exchange rates and an open capital account in opposition to the consensus view espoused by Nurkse (1944). See Bordo and James (2004).

The design of the Bretton Woods system was heavily influenced by interpretations of the causes of the Great Depression of the 1930s. Indeed, this period was something of a foil for post-war planners to follow their own agenda (Gardner, 1956, Steil 2013). The main lessons for the international monetary system were that unstable exchange rates were damaging, competitive devaluations and 'hot money' had to be prevented, and the system should be freed from the depressive effect of "Golden Fetters" (Nurkse 1944, Eichengreen 1992). Except for the last, these verdicts are not dissimilar to the hopes for the post-1914 international monetary system.

Keynes' sequel to the Economic Consequences of the Peace (the *Economic Consequences of Mr. Churchill*, 1925) drew attention to the folly of inappropriately pegged exchange rates, although without rejecting pegged exchange rate regimes per se. In the end, it proved impossible to dispense with gold entirely even under the post-war Bretton Woods framework.⁶ While there is resonance, therefore, between the goals of the inter-war and post-war international monetary system, Keynes' 1919 treatise and the failure of economic diplomacy during the 1930s had more profound implications for the institutional organisation of the post-war system than for views on the exchange rate regime. These continued to favour stability based on a state's public commitment to maintain a specific exchange rate parity.

The lessons from Versailles meant that even before the US joined the Second World War, the WWI system of war debts was avoided between the US and the Allied powers as part of the expression of common commitment to freer trade after the war. Thus the avoidance of debts in

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⁶ The use of gold as numeraire for the IMF and as the fundamental valuation for currencies was not removed until 1973.

return for support from the US was enshrined in formal agreements with Britain (Atlantic Charter 1941, Mutual Aid Agreement 1942). Nevertheless, British war debts to the Empire and Commonwealth still featured as defining elements in the post-war settlement since they increased Britain's overseas debt well beyond their ability to repay them in foreign exchange (Schenk 2010, Pressnell 1987). The so-called Sterling Balances became a symbol of the decline of Britain's postwar international economic position and the focus of multilateral cooperation after the War.

The design of the international system aimed to ensure the freer flow of goods while using exchange controls to prevent "hot money" movements in short term capital. It was also crucial that Europe was united economically (if not politically) through freer trade. Adam Smith's gains from trade, which had underpinned the first globalisation, remained the rhetorical foundation for the renewal of the global trading system in the 1950s, although this time trade liberalisation was restricted mainly to manufactures, leaving agricultural producers at the edge of the system. The US did not advocate free trade, but a 'freer' trade regime that sought to reduce discrimination (against the US) and bilateralism. The British imperial preference system that persisted after the war was gradually eroded in the 1950s, setting the stage for constitutional decolonisation in the decade that followed (Schenk 2010). Meanwhile, Keynes' ideas of fiscal dominance and demand management policies fitted well with the moral and political imperative of Western governments to deliver welfare states, full employment and prosperity to their populations.

The contrast between the British (Keynes) and American (White) plans for the post-war institutional structure emphasise each nation's priorities, but they also had many similarities

(Gardner 1945, Pressnell 1987, Horsefield 1969). Among the most fundamental areas of agreement was that the international monetary system required a formalised, inclusive institutional structure that would reflect the US predominance as the world's largest creditor. Despite the failure of the League of Nations to sustain international economic cooperation in the inter-war period, the faith in formal multilateral economic institutions was imbedded in the wartime planning for peace. In both plans the aim was to avoid the turn to economic nationalism that had plagued the 1930s by providing short term finance for short term balance of payments problems. Keynes devised a much larger pool of liquidity with more symmetric treatment of surplus and deficit countries as would benefit countries like the UK, which would emerge from the war substantially weakened. White, in contrast, proposed a more limited contributory fund with the US dominating its governance as the world's largest creditor and able to apply pressure on deficit countries to correct their domestic economies. Both plans also had mechanisms to deal with the debts to the Empire and Commonwealth that the UK had built up during the war, although in the end both governments insisted that the sterling balances be treated separately (Schenk 2010: 40-42). In the end, the accumulated debts disappeared from the plans and White's vision dominated as a more politically manageable solution, especially for an American population exhausted and frustrated by the European wars (Steil, 2014).

The framework for the system was hammered out in a series of meetings that increased in size between 1942 and 1944. This was undoubtedly a triumph of economic diplomacy that ultimately brought representatives of 44 countries together at Bretton Woods New Hampshire in July 1944. The process was in stark contrast to the 1919 economic settlement described by Keynes, which took place *after* the cessation of hostilities, where only four major powers were

represented, the Americans were underprepared and the details were delegated to a reparations commission that took two more years to set the amount, by which time the reparations were inextricably intertwined with the ability of the victorious powers to repay war debts. It was also in stark contrast to the restoration of the interwar gold exchange standard, which (despite several summits) lapsed into ad hoc, politically inspired choices of currency pegs to gold. A key goal of the post war period was therefore to create a framework for cooperation and coordination underpinned by credible rules to ensure a lasting and prosperous peace (Giovannini 1993).

Nevertheless, the system designed at Bretton Woods never operated as planned (Gardner 1956). The task of reconstruction after the war was delegated to an International Bank for Reconstruction and Development. This had the advantage of insulating the key international monetary institution, the International Monetary Fund (IMF) from the burdens of post-war reconstruction but also left the financing of this crucial transition period largely in limbo. There was an open and rolling deadline for countries to adhere to the convertibility at pegged exchange rates, which was required to restore multilateral trade and payments. This ended up lasting for twelve years in the case of Western Europe. Secondly, the IMF was the framework for the multilateral payments system, designed to support the more liberal, non-discriminatory trade system announced in the 1941 Atlantic Charter. But completion of the International Trade Organisation foundered on the waning enthusiasm for international compromise by 1946 and the realities of the challenges of post-war national recovery. The ITO was never ratified.

Initially, the US tried to accelerate adherence to the IMF as a condition of helping the UK with its post-war recovery (Pressnell 1987). In one of Keynes' last major interventions into

economic diplomacy, the Anglo-American Loan Agreement of 1946 required Britain to introduce convertibility within one year

The 1946 Anglo-American Loan Agreement was Keynes' final intervention in global political economy. The negotiations in Washington exhausted him and the outcome was a disappointment. In echoes of his verdict on Versailles, in May 1945 Keynes identified three options for Britain after the war: 'Starvation Corner', 'Temptation' or 'Justice'. The first would see Britain retreat into austerity and repudiate its debts, the second would add to the debt by borrowing from the US. 'Justice' would entail cancelling a quarter of Britain's wartime debt, funding half, a grant from the US to reimburse British expenditure before the Lend-Lease Act had become operable and a smaller US loan on generous terms (Pressnell 1987). Neither the Bank of England nor the UK Labour government wanted publicly to be seen to be considering repudiating its wartime debts, while the Americans sought some cancellation as a condition of the loan. Keynes continued to seek a 'Justice' solution, albeit reduced in scale, including cancellation of a proportion of Britain's wartime debt in return for making sterling more convertible and a large US loan but he did not find support from London (Schenk 2010: 47-53). After 3 months of negotiations led by Keynes, Sir Edward Bridges arrived in Washington from London to take over. A week later, Britain had fallen into 'Temptation' with a large loan, no settlement of war debts and a commitment to introduce convertibility on current account within a year.

Keynes died just over four months later from a heart attack at his home in Sussex aged 63.

He did not live to see the run on the pound in July-August 1947 that prompted the reintroduction of exchange controls after only a few weeks. The lesson drawn across Western

Europe from the sterling crisis of 1947 was that the convertibility required to adhere to the core articles of the Fund had to be postponed indefinitely. Instead, regional solutions like the European Payments Union and the Sterling Area facilitated restricted multilateral payments and the rapid liberalisation of trade. While this ad hoc system did not align fully with the vision of Bretton Woods, it did provide the foundations for freer trade for Western Europe, the British Empire and Commonwealth and North America.

There followed two decades of sustained economic growth, driven by the reduction in quotas and tariffs on international trade, the spread of technological innovation from the US, and Japanese and European technological catching up to the USA. With the help of cooperative efforts like Marshall Aid, European integration, the IMF and regional payments systems, the perils of a repeat of Keynes' 1919 scenario seemed to have been avoided and the Bretton Woods system gained a reputation for stability and cooperation. But the international monetary system was ultimately torpedoed by the failure of the US, at the system's core, to follow credible, sound financial policies during the 1960s. In 1919 Keynes had identified the start of an enduring asymmetry between the US and Europe and the periodic failure of American leadership commensurate with its economic power.

The pegged exchange rate era from 1959-1971 proved to be "unstable, complicated, unreliable and temporary" primarily because of the inability of countries to subordinate their national interests to collective efforts to stabilize exchange rate rates. Thus, there were periodic adjustments to pegged rates, but they tended to come only after a build-up of market expectations with disruptive effects. The conflict between national and international interest was reflected in the persistent dispute between Germany (often with the Netherlands,

Switzerland, France) on one side and the US on other over which side should adjust its policies to stabilize exchanges (Germany to inflate or the US to deflate). The identification of an 'exorbitant privilege' (Rueff 1967, McCauley 2015) provided by the dollar's dominant place in foreign exchange reserves seemed to many European observers to allow the US to escape the constraints of the pegged exchange rate system. This had been foreseen by Keynes in his proposal for a 'neutral' international unit of account (Bancor, with a fixed gold value) in his 1942 International Clearing Union scheme. Ultimately, the US took unilateral action in August 1971 by suspending gold convertibility, threatening tariffs and a retreat to economic nationalism if other countries did not adjust their exchange rates to take pressure off the dollar (Bordo 2018).

But the end of the Bretton Woods system arguably started soon after it began operating as planned. By 1961, within two years of European states meeting the convertibility terms of the IMF Articles of Agreement, discussions were already under way for how to reform the system as it revealed its instability (Triffin 1960). For the international monetary system, the pegged exchange rate framework based on the dollar that emerged after European countries declared current account convertibility in late 1958 was faulty and required fresh cooperative efforts to prop it up. But instead of the IMF, the G10 and the Bank for International Settlements became the locus of plumbing solutions to the strains caused by the dollar's link to gold, the shifting balance of economic power between the US, Germany and Japan and the retreat of sterling as an international currency.

The most effective solutions came from the G10 central bank governors at the Bank for International Settlements (BIS). It was here that the Gold Pool was formed in 1962 for G10

central banks to intervene in a coordinated way in the London gold market to sustain the official dollar price of gold, which was the foundation of the Bretton Woods system. In this sense, during most of the years of its operation the gold-dollar exchange rate regime did not function as planned at Bretton Woods. After six years the market finally toppled the Gold Pool in March 1968 and the fixed gold price was limited to transactions between central banks and through the IMF while the rest of the world operated with a market-determined gold price for the dollar. (Toniolo 2005, Bordo, Monnet and Naif 2019). The BIS also provided the meeting place for central bank governors to arrange bilateral currency swaps and multilateral lines of credit to help the retreat of sterling as an international currency without destroying the international monetary system as a whole.⁷ Britain and other European states drew on their quotas at the IMF, but often as a back-stop to the less conditional support arranged quietly in Basel (Toniolo 2005, Schenk 2010). Table 1 shows the support offered to sterling, the French franc and the Italian lire coordinated through the BIS in the 1960s and 1970s. In terms of scale, the support in the November 1964 for sterling amounted to the equivalent of \$31.7 billion in 1997 which can be compared to the \$40 billion bail-out of Mexico by the IMF, the BIS, the World Bank and Swaps in that year.

⁷ This cooperation extended well beyond Bretton Woods: the final support arrangement for sterling was launched in February 1977 (Schenk 2010).

Table 1: Concerted G10 Bilateral Support and FRBNY swaps 1964-1977

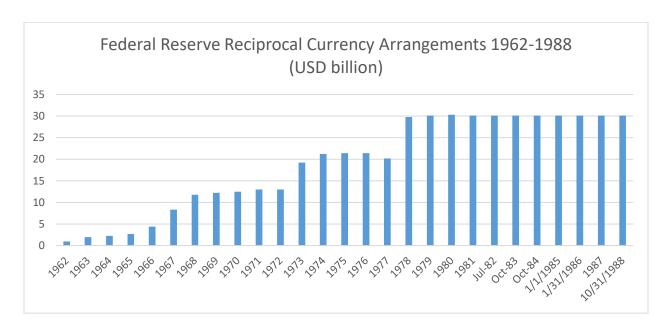
Amounts in millions of US dollars

Table 1

	Date	Bilateral Concerte (+Japan & Canada)	FRBNY swap	BIS	Total
Bank of England	November 1964	1280	1000	250	2530
Bank of England	September 1965	475	400 (GBP deposits) +750 swap	50	925
Bank of England	September 1966	350	1350		1700
Bank of England	November 1967	850	1500 swap + 500	150	3000
Bank of England	March 1968	1075	2000 swap +550	250	3875
Bank of England	March 1969	800	+350	250	1400
Bank of England	June 1976	2600	2000	150	5300
Bank of England	February 1977				3000
Banque de France	July 1968	600	600	100	1300
Banque de France	January 1969	1350	500	100	1950
Banque de France	August 1969	1700	500	300	2500
Banque de France	February 1970	303	500		803
Banca d'Italia	March 1964	350	250		600

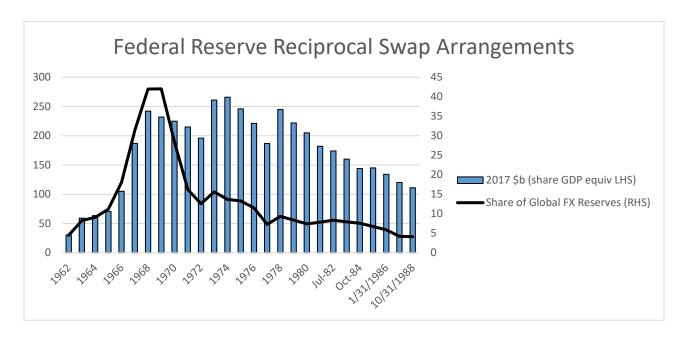
¹ Bilateral Concerte are predominantly facilities for \$ deposits on 3-month maturity, renewable once. Some are for currency swaps in other currencies (e.g. Banque de France, 6 January 1969 DM/FF swap with offered by Bundesbank for equivalent value of \$600m).

Sources: BISA 7.18(23) GIBB9. Schenk (2010).



Source: Federal Reserve Bulletin various issues.

Figure 2 shows the value of Federal Reserve central bank swap facilities in current values and Figure 3 shows that in 1970s these bilateral swap facilities amounted to the equivalent of over 20 per cent of global foreign exchange reserves and then declined.⁸ The 2017 value (as a share of US GDP) which shows that the facilities were about as large as the drawings on Fed swaps in 2008.



Source: see Figure 2 for swap facilities. Foreign Exchange Reserves, *IMF Annual Report*, various issues. Excluding U. S. holdings of foreign exchange and including throughout the period amounts incorporated in published U. K. reserves in 1966 and 1967 from proceeds of liquidation of U. K. official portfolio of dollar securities. The figures for 1971 include the U. K. official assets "swapped forward" with overseas monetary authorities, as reported in U. K. Central Statistical Office, Economic Trends. The figures for 1973 include official French claims on the European Monetary Cooperation Fund.

On the other hand, the efforts of the G10 finance ministers to reform the international monetary system in more permanent ways was much less successful. They delegated technical matters to deputies but were still unable to resolve the fundamental problems in the global system (Solomon 1982, James 1996). Their main contribution was to launch the SDR just as the

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⁸ For a discussion of Federal Reserve swap operations see Bordo, Humpage and Schwartz (2015)

pegged exchange rate system fell apart and the inflation took hold. The political compromises in the design of the SDR meant that it was not as useful an addition to global liquidity as had been hoped and did not relieve the system of its reliance on the US dollar with all the challenges and asymmetries this imposes (Schenk 2010). Had the US been able to commit to a policy of price stability during the 1960s, the system could probably have survived longer with these adaptations (Despres, Kindleberger, Salant, 1966), McKinnon 2015, Bordo 2018). This serves to highlight the 'unstable and complicated' nature of the Bretton Woods compromise, which relied on reconciling the domestic priorities of the US policy-makers with the needs of the global economy. Recognising the asymmetry in the global system from the time of the Versailles Treaty in 1919, when the US had power but failed to provide effective leadership, Keynes had sought to introduce a more balanced structure that avoided relying so heavily on the US, but his innovative approach was in the end not feasible in the post-war political and economic climate.

Section 4. The Third Turning Point: The 1970s Great Inflation and Managed Floating

The collapse of the Bretton Woods System in 1971-1973 was in part brought about by the U.S. shift to an inflationary stance in the mid 1960s and its departure from following the rules as the center country in the pegged exchange rate system. The end of the gold anchor in March 1968, realignment of the DM in 1969 and the float of sterling in June 1972 all pulled the system apart.

The US administration's effort to force other countries to adjust to US inflation did not convince the markets and the new, more flexible pegs set under the Smithsonian Agreement in

December 1971 quickly unwound. There is an extensive literature on the Great inflation (Bordo

and Orphanides 2013) that followed through the 1970s. Many attribute it to flawed monetary policy by central banks trying to manipulate the Phillips curve tradeoff to achieve full employment. Others attributed it to the accommodation of supply shocks, in particular the six-fold increase in the price of oil in 1973-74.

The Great Inflation marked the abandonment of the Keynesian consensus in policy-making that had spread from the 1950s (Clarke 1990). Keynes, himself, had put little emphasis on exchange rate policy in *The General Theory* (1939) but his contribution to the design of the Bretton Woods system concurred with the assumption that the most desirable international monetary system needed to have stable or pegged exchange rates. This premise had been fundamental to economic orthodoxy since the 1850s, but it disappeared quickly. By 1976 even the IMF Articles of Agreement recognized the legitimacy of a floating exchange rate. The new orthodoxy of capital account liberalization was quick to catch hold partly because it merely recognized the status quo, in which the Eurocurrency market had already risen above the regulatory reach of national monetary authorities (Schenk 2010b).

The Keynesian world of pegged exchange rates, capital controls and international cooperation had disappeared by the 1980s. But the consensus during the 1970s can be overstated. The US moved resolutely to a managed float, albeit with periods of intense intervention (e.g. 1975-78) (Bordo, Humpage and Schwartz 2015). But Western Europe drew closer to monetary union (an irrevocably fixed exchange rate system) among European Community members from 1969. Other countries caught in the middle sought middling strategies, such as retaining a peg to the dollar or, when that became unstable, to a trade-weighted basket of currencies (Schenk and Singleton 2011).

During the 1970s, policy makers were unsuccessful in reducing inflation in part from following doctrine, later deemed to be flawed (Meltzer 2010) i.e.the Phillips curve and the belief in cost push forces as the key cause of inflation, to be dealt with by wage and price controls). In the UK, policy-makers followed Nicholas Kaldor's (1971) view that expansionary money financed fiscal policy could raise the growth rate while inflation could be suppressed by controls. More fundamentally the Great Inflation persisted so long because of the unwillingness of monetary authorities to follow the tight monetary (and fiscal) policies needed to break the back of rising inflationary expectations for fear of the recession and unemployment that would occur. This led to a ratcheting up in inflation and inflationary expectations as the Federal Reserve (and other central banks) when facing a rise in inflation tightened and then when the economy soured, loosened too soon.

On the international scene, high and variable inflation made exchange rates volatile too. This reflected Milton Friedman's (1953) view that floating exchange rates only work if they are accompanied by stable domestic macroeconomic policies. Deliberations at the IMF in the early 1970s to restore the par value system as well as exchange market intervention were doomed to failure in the face of divergent national economic policies.

In 1971, the IMF formed the Committee of 20 to broaden the discussions on reforming the international monetary system beyond the G10. Its deliberations became bogged down in technical details and internal dissention during the collapse of the pegged exchange rate system, but its proposals to reinvigorate the SDR came to partial fruition (Schenk 2017). In 1974 the valuation of the SDR valuation was changed from a weight in gold to a basket of 16 currencies, reduced to 5 in 1981 and with a market interest rate attached to make it a more

appealing asset. On the other hand, the C20's proposal to create a substitution account to help the SDR take over more of a role as a global reserve currency from the dollar was debated throughout the 1970s but ultimately lost traction in the early 1980s as the dollar exchange rate strengthened (McCauley and Schenk, 2015).

The upward spiral in inflation and the downward spiral in the dollar exchange rate ended with the Volcker shock of October 1979. President Carter appointed Paul Volcker to break the back of inflation and inflationary expectations. He followed a tight monetarist monetary policy by cutting the monetary base and allowing interest rates to rise to above 20%. This created serious recession between 1979 and 1982 which led to double digit unemployment rates and prompted the largest sovereign debt crisis in history among developing economies, but it did succeed in drastically reducing inflation by the mid-1980s (Schenk 2017). Similar policies were followed by Margaret Thatcher and Alan Walters in the UK in 1980 and in Canada and other countries. By the end of the 1980s virtually all advanced countries had returned to low inflation. These actions ushered in the era of monetarism, which then spread in amended forms from the US to the rest of the world. During this period, the success of the credibility of low inflation policies was buttressed by a new paradigm for monetary policy based on central bank independence (CBI), inflation targeting (IT) and floating exchange rates.

Although Friedman's views, buttressed by those of John Taylor and Allan Meltzer, that the pursuit of stable rule-like domestic policies obviated the need for international monetary policy coordination, the G7 continued its efforts to coordinate fiscal and monetary policies to stabilize exchange rates in the Plaza and Louvre Accords in the 1980s. This attested to the enduring attraction of international monetary cooperation to stabilize exchange rates. In both cases, the

effects were less than was hoped. It proved easier to talk the dollar down in the Plaza Accord (1985) than to convince markets that it was undervalued in the Louvre Accord in 1987 (Truman 2016, Schenk 2017). The impact of the G7 pressure on Japan to forego its national economic interest in the pursuit of an appreciation of the Yen against the dollar prompted a financial crisis that left the Japanese economy in the doldrums for over a decade.

Early in the floating era, the arena of international cooperation shifted to international banking and financial markets, reflecting the systemic risks posed by phasing out of capital controls and the liberalization of domestic financial markets, most notably with the inauguration of the Basel Committee on International Banking supervision hosted at the BIS in 1974 (Goodhart 2011). A shudder in the international banking system in the summer of 1974 sent national regulators scrambling to ensure that no cross-border institution was left unsupervised (Schenk 2014). How exactly this was to be achieved, however, remained elusive. No central bank wanted to be responsible for the liquidity of the international money market and the Basel Concordat of 1975 left open where responsibility lay. Instead, the Basel Committee turned to discussions of capital adequacy and country risk while the accumulation of sovereign debt by developing economies threatened global financial stability. The Latin American and East European sovereign debt crises of 1982 helped accelerate this process, but progress was still slow, resulting in the first Basel Accord on minimum capital reserves in 1988.

At the Bretton Woods Conference in 1944, the BIS came under fire from both the US and UK Treasury representatives as well as several European delegates. This was partly due to its taint from allegations of wartime collaboration with Axis powers over gold, but also because of the potential for the BIS to interfere with the successful adoption of the new IMF. Keynes strongly

resisted calls for the immediate liquidation of the BIS for practical reasons, but supported the idea that it should be closed down once the IMF was up and running. A US proposal that joining the IMF should be conditional on a country's central bank fostering the liquidation of the BIS provoked a fury that further undermined Keynes' health in this precarious time (Toniolo 2009; 169; Skidelsky 2009). Nevertheless, Keynes did agree that the BIS should be liquidated eventually and a phrase to this effect was inserted into the IMF Articles. By this time the BIS had already become a forum for cooperation among central bankers and thus fit with the Keynesian paradigm of a managed and coordinated international monetary system, but it was also a visible relic of the war debt/reparations tangle devised at Versailles and therefore was deemed incompatible with the new vision of international monetary cooperation.

In the end the BIS persisted as the post-war realities of the Cold War and continued trade and exchange controls meant that the global situation unfolded differently than anticipated by those at Bretton Woods. By the 1960s, as seen above, the BIS was essential to propping up the adjustable pegged exchange rate system and it was already starting to monitor the growing Eurodollar market that overcame national exchange controls. From the 1970s, despite the limited geographic scope of its governance, the BIS was in prime position to become the main locus of coordinating international capital market supervision and regulation as these markets ballooned out of the post-war controls. The IMF, meanwhile, turned to supporting reform in developing countries as sovereign debt restructuring gathered pace in the late 1970s and early 1980s (Boughton 2001, James 1996).

The emerging market crises of the 1990s confirmed that the international economic system imagined by Keynes had disappeared. Where countries persisted with pegged exchange rates in

the 1990s (such as in Russia, East and Southeast Asia, South America) a series of damaging currency crises ensued as the dollar strengthened on the basis of the Fed following domestic policy priorities, leaving emerging market currencies overvalued. Their efforts to hold on to pegged rates with open capital markets failed. By the 2000s (after the Euro finally eliminated most of the national currencies of the EU), floating or managed floating exchange rates had spread further (Bordo and Schenk 2017).

It is important to recognize that the crises of the 1990s and 2000s were mainly through the capital account due to the liberalization of capital markets rather than Keynesian shocks through the current account. The inexorable financialization of the global economy made the Keynesian world of capital controls and international cooperation seem a mere historic relic. Indeed, the IMF began to see its role as having shifted from financing current account shortfalls to stemming capital account crises.

Section 5 The Fourth Turning Point: The Global (Transatlantic) Financial Crisis.

The 2007-08 financial crisis was fundamentally not an international monetary issue. Certainly, there were substantial global imbalances in the 2000s due partly to the huge success of foreign companies in China producing for export and exchange rate rigidity.⁹) The Chinese export surplus created a demand for US government securities for China to hold as foreign exchange reserves. It was facilitated by the benign neglect over the depreciation of the dollar from 2000-2007, to which the Chinese Yuan was pegged.¹⁰ A key facilitating factor for both the dollar depreciation and an asset price boom in this period was expansionary Federal Reserve

⁹ 60% of China's exports were made by foreign invested firms in the mid-2000s. This trade imbalance it has been argued reduced the cost of living for European and American low income consumers (Broda and Romalis 2008). ¹⁰ China moved to a peg to a basket of currencies dominated by the US dollar in 2005.

monetary policy (Taylor 2007, Bordo and Landon Lane 2013). These factors contributed to a boom and later bust in personal (and corporate debt), including mortgages, in the US and Europe. But the core cause of the global crisis was in financial markets and failures of regulation and supervision both external and internal to global investment banks and to a myriad of other "shadow banks".

As in other crises after 1919, there were immediate efforts to coordinate economic policies, including the November 2018 G20 commitments to fiscal and monetary expansion. This response rested on an interpretation of the causes of the interwar depression that would likely have found favour with Keynes (Eichengreen 2016, Bernanke 2015). The fiscal coordination, however, was quickly abandoned while the Bank of England, Bank of Japan, ECB and Federal Reserve pursued uncoordinated programmes of monetary expansion through quantitative easing. This posed challenges for many emerging market economies through volatile capital flows and prompted calls for a new currency war (Wheatly and Garnham 2010), or to replace the dollar as a global currency (Zhou 2009) and also softened the IMF's stance on the usefulness of capital controls (IMF 2012). Another resurrected (and more successful) system of coordination was the reciprocal currency swaps between the Fed and other central banks (ECB, Bank of England, Banque Nationale Suisse) which provided dollar liquidity for banks outside the US (McCauley and Schenk 2020). Together with the ECB and SNB European swap networks, this system also helped ameliorate the effects of the European sovereign debt crisis from 2010 (Goldberg, Kennedy and Miu 2011). These aspects of the global financial safety net, however, left gaps for emerging market economies that have only been partially filled by regional financial agreements (reserves pooling and swaps). The IMF tried to launch new facilities with

no ex post conditionality to reduce the stigma associated with drawing from the Fund, but this was not fully successful (Schenk 2019). The 2009 Flexible Credit Line, for example, was taken up by only 3 countries (Mexico, Poland and Colombia) but tied up close to SDR70 billion of the Fund's available resources.

The GFC challenged prevailing economic policy orthodoxy but has not fully dislodged it. There is no consistent move to end central bank independence (although it is being challenged in the US by President Trump, and in the UK in the context of Governor Mark Carney's negative comments on Brexit, also by critics of the ECB and the European sovereign debt crisis). Some have seen an opportunity to resurrect Keynesian policies (Skidelsky 2009) including a version of the international clearing union (Davidson 2009). Rather than shifting toward a more Keynesian world of monetary cooperation, financial capital controls and stable exchange rates, however, the world seems to be moving in a direction of economic nationalism, trade protectionism and ever tighter controls on international migration while leaving capital markets open.

Indeed, even at the IMF after considerable internal debate, in November 2012 the Executive Board agreed on its new institutional view on capital flow management, that 'in certain circumstances, capital flow management measures (CFMs), i.e., measures that are designed to limit capital flows, can be useful and appropriate (IMF 2012). These circumstances include situations in which the room for macroeconomic policy adjustment is limited, or appropriate policies take undue time to be effective'. The institutional view emerged gradually from a position paper in 2010 (Ostry, Ghosh, Habermeier, Chamon, Qureshi and Reinhardt 2010).

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¹¹ Selected Decisions and Selected Documents of the IMF, Thirty- Ninth Issue -- The Acting Chair's Summing Up— The Liberalization and Management of Capital Flows—An Institutional View, Executive Board Meeting 12/105, November 16, 2012 Prepared by the Legal Department of the IMF as updated as of March 31, 2017

While this in no way signals a return to the IMF's classic Bretton Woods era stance, it does mark a shift in emphasis over free and open capital markets.

In his 1919 treatise Keynes warned of the destructive social as well as economic consequences of inflation, especially the dangers of increased economic inequality. As an echo to Keynes warning in the aftermath of the financial crisis, these social and political tensions have become acute. Piketty (2014) provided evidence of growing inequality in per capita income both between and within countries over the long term, and heightened awareness and debate over the causes. The resolution of the crisis by bailing out Wall Street (banks and bankers) at the expense of Main street (house owners), reducing the return to savers, all sharpened the focus on inequality and the public sense of grievance and marginalization. The prolonged and uncertain recovery and perceived unequal burden leaves populations in countries around the world vulnerable to more radical political solutions (e.g. Hungary, Austria), or the cry to return to a perceived 'golden age' of 1950s (US Make America Great) or 1960s (UK before joining EU) prosperity. It has also, like the end of the gold standard era, prompted a backlash against international long-distance migration.

Conclusions:

Keynes' The Economic Consequences of the Peace has resonated with policy-makers and the public ever since its publication. It continues to be implicitly or explicitly referenced in the efforts to promote international economic cooperation in the aftermath of crises through the century. The accuracy of its prediction that an irrational promotion of conflicting national interests would result in economic disaster for the people of Europe has weighed heavily on

policy-makers ever since. The history of the 20th century demonstrates that international economic cooperation itself is not unusual, but it does tend to be "unstable, complicated, unreliable and temporary" because tensions inevitably arise between national and international objectives. While these interests might correspond in the wake of a crisis or emergency (partly due to the lessons learned from Keynes' critique of the 1919 settlement) domestic political as well as economic objectives will ultimately dominate despite the construction of elaborate international institutions to overcome or to mediate these conflicts.

An exception is the more functional, but limited form of cooperation evident in the Bank for International Settlements, particularly in the 1960s when central bankers from the G10 deliberately tried to insulate themselves from political influence by focusing on technical rather than system cooperation and by restricting the pubic transparency of their deliberations. This is in marked contrast, for example, to the G10 finance ministers' deliberations in the 1960s to reform the international monetary system, which were prolonged, expensive and ultimately unproductive.

A further theme of Keynes' treatise is the peril of making economic policy without reference to the underlying economic realities. His book therefore sets out detailed data to demonstrate the potential for Germany to meet its reparations payments. For him, this use of evidence is important because it shows how divorced from a rational perspective the settlement had become. The belief in the power of data-driven economic policy-making was subsequently reflected in the extremely complex structures of the League of Nations with its many technical committees collecting a bewildering amount of data from its member countries to serve as a rational basis for policy-making.

Keynes was critical of all four leaders at Versailles and of their advisors. He identified the vulnerability of political leaders to extremes of public opinion, particularly the emotional desire for a punitive peace settlement after such a painful wartime experience and the continuation of the myth that the debts accumulated during wartime could be repaid. But he gave most space to criticizing US President Wilson and his advisers, claiming that he was under-prepared and therefore lacked decisiveness. He was even critical of his physical appearance; his description of Wilson as being more impressive when he was sitting down rather than standing was a metaphor for the position of the US in the global system – seeming important when at rest, but not very impressive when it came to taking action. His portrayal of Wilson on the one hand as a sophisticate in terms of his dress but on the other hand the body beneath this façade 'lacking in fine-ness' might also reflect a view of the US as seeming to have become modern and as sophisticated as Europeans, but not having fully made this transformation from rougher stock. These interpretations of the US President have echoes in how the American president is portrayed today in Europe (even down to criticism of his hands and the quality of his advisers). The gulf between Europe and the US that plagued the interwar period should be a warning of the risks of this lack of understanding and communication. Once again, we have world leaders in thrall to vocal public opinion that pushes the agenda toward economic and political nationalism. This is evident in US trade policy, Britain's separation from the European Union, the erosion of democratic institutions in Eastern Europe. By 2016, once again in the United Kingdom it seemed that Keynes' observation in 1919 that "Europe is apart and England is not of her flesh and body" was emerging as a defining ideology.

In sum, the pendulum has swung from the gold standard and the first era of globalization, through the bleak thirty years war and its aftermath, back to the Great Moderation and the second era of globalization. This pattern has resonance to Keynes' views on international monetary relations. The gold standard was buttressed by a rule that subsumed internal (domestic) balance to external balance. That helped foster the first era of globalization. Tensions from this arrangement became manifest in the nationalist backlash in the first half of the twentieth century and the shift of focus to the dominance of domestic considerations and autarky (tariffs and capital controls). Keynes' contribution to the post-1945 era was a rulesbased arrangement to reconcile internal with external balance. With extensive international cooperation and tinkering it worked for two decades but it broke down primarily because of the failure of the centre country, the U.S., to follow the basic rule of maintaining price stability. In subsequent decades after the failure of the advanced countries to follow domestic macroeconomic policy rules to maintain price and exchange rate stability which created the Great Inflation, the advanced countries have returned to a rules-based system under floating exchange rates based on CBI, IT and credibility for low inflation. These features characterised the Great Moderation, but also allowed a complacency about the governance of international financial markets that sowed the seeds for the next great global crisis in 2007-08. There is considerable resonance to the pre 1914 gold standard that fostered the first era of globalization. Then just like the first era, a backlash emerged against the adverse effects of trade integration and financial globalization following the GFC. It in turn reflected, failures in financial regulation, monetary policy, and global imbalances. We are back to viewing the second era of globalisation as fitting Keynes' description of the first era as "Unusual, Unstable,

Complicated and Temporary". Will the world get back on the track of the pre-crisis era or go in a similar direction Keynes prophesized in 1919 for the post World War I era? The fourth turning point in the international system is still incomplete, but following from Keynes, history reminds us that nostalgia for an earlier period needs to be tempered by a realistic understanding of how "unstable, temporary, complex and unreliable" were the golden ages of international economic cooperation.

References

Arndt, H.W. (1944), Economic Lessons of the Nineteen Thirties, London: Frank Cass.

Bernanke, Ben S. (2015) The courage to Act: a memoir of a Crisis and its aftermath, New York,

W.W. Norton.

Bordo, Michael, Eric Monnet and Alain Naif (2019) "The Gold Pool (1961-1968) and the Fall of the Bretton Woods System. Lessons for Central Bank Cooperation" *Journal of Economic History December*

Bordo, Michael (2018) "the Imbalances of the Bretton Woods System 1965 to 1973: US Inflation, The Elephant in the Room" *NBER Working Paper* 25409. December

Bordo, Michael (2017) "The Second Era of Globalization is Not Yet Over: An Historical Perspective" *NBER Working Paper*.

Bordo, Michael and Christopher Meissner (2015) "Growing Up to Stability? Financial Globalization, Financial Development and Crisis" *NBER Working Paper* 21710 (June)

Bordo, Michael and Pierre Siklos (2015) "Central bank Credibility: An Historical and Quantitative Evolution." Chapter 3 in *Central Banks at a Crossroads: What Can We learn from History?* (eds)

Bordo, Michael, Oyvind Eitrheim, Marc Flandreau and Jan F. Qvigstad (2016) Central Banks at a Crossroads. New York: Cambridge University Press

Bordo, Michael, Owen Humpage and Anna Schwartz (2015) *Strained Relations: US Foreign Exchange Operations and Monetary Policy in the Twentieth Century*. Chicago: University of Chicago Press

Bordo, Michael and John Landon Lane (2013) "Does Expansionary Monetary Policy Cause Asset Price Booms: Some Historical and Empirical Evidence" NBER Working paper 19585.

October . Also in Michael Bordo (2019) *The Historical Performance of the Federal Reserve: The Importance of Rules.* Stanford: Hoover Institution Press

Bordo, Michael and Athanasios Orphanides (2013) *The Great Inflation*. Chicago: University of Chicago Press

Bordo, Michael and Harold James (2002) "The Adam Klug Memorial Lecture: Haberler versus Nurkse. The Case for Floating Exchange Rates as an Alternate to Bretton Woods" in Arie Arnon and Warren L. Young (eds) *The Open Economy Macromodel: Past, Present and Future*. Boston: Kluwer Academic Publishers pp161-182.

Bordo, Michael (2002) "The Globalization of Financial markets: What Can History Teach Us?" in Leonardo Auernheimer (ed) *International Financial Markets*. Chicago: University of Chicago Press

Bordo, Michael and Hugh Rockoff (1996) "The Gold Standard as a "Good Housekeeping Seal of Approval" *Journal of Economic History* 56. 02 389-428

Bordo, Michael and Finn Kydland (1995) "The Gold Standard as a Rule: An Essay in Exploration' Explorations in Economic History (October)

Bordo, Michael (1981) "The Classical Gold Standard: Some Lessons for Today" *Federal Reserve Bank of St. Louis Review*. Vol 63, No.6, (May).

Boughton, James M. (2011) *Silent Revolution: the International Monetary Fund 1979-1989*, Washington: International Monetary Fund.

Broda, C. and J. Romalis (2008) 'Inequality and prices: does China benefit the poor in America?' NBER, University of Chicago.

Clavin, Patricia (2013) Securing the World Economy: the reinvention of the League of Nations 1920-1946, Oxford: Oxford University Press.

Clarke, Peter (1990) *The Keynesian Revolution in the Making, 1924-1936*, Oxford: Oxford University Press.

Davidson, Paul (2009), The Keynes Solution: The Path to Global Economic Prosperity.

Barry Chiswick and Timothy J Hatton (2004) "International Migration and the Integration of Labor Markets" in Michael D Bordo, Alan M. Taylor and Jeffrey G. Williamson (eds) *Globalization in Historical Perspective*. Chicago: University of Chicago Press

Emil Despres, Cahrles Kindleberger and William Salant (1966) "The Dollar and World Liquidity:

A Minority View" *Economist* 5 (February); 526-29.

Eichengreen (2018) *The Populist Temptation: Economic Grievances and Political Reaction in the Modern Era.* New York: Oxford University Press.

Eichengreen, Barry (2015) *Hall of Mirrors: the Great Depression, the Great Recession,* and the Uses - and misuses - of History, Oxford: Oxford University Press.

Barry Eichengreen and Marc Flandreau (2009) "The Rise and Fall of the Dollar (Or When Did the Dollar replace Sterling as the Leading Reserve Currency?" European Review of Economic History Vol 13, number 3:377-414

Eichengreen, Barry and Timothy Hatton (1988) "interwar unemployment in International perspective: An Overview" in Barry Eichengreen and Timothy Hatton (eds) *Interwar*Unemployment in International Perspective. NATO ASI Series (Series D: Behavioral and Social Sciences) Vol43. Springer; Dordrecht.

Eichengreen, Barry (1992). Golden Fetters. New York: Oxford University Press.

Eltis, David and David Richardson (1997) 'The "numbers game" and routes to slavery', *Slavery and Abolition*, 18(1), pp. 1-15.

Findlay, Ronald and Kevin O'Rourke (2004) "Commodity Market Integration, 1500-2000" in Globalization in Historical Perspective (eds) Michael D Bordo, Alan M. Taylor and Jeffrey G. Williamson. Chicago: University of Chicago Press.

Fogleman, Aaron S. (1998) 'From slaves, convicts and servants to free passengers: the transformation of immigration in the era of the American revolution' *Journal of American History*, 85(1), pp. 43-78.

Hatton, Timothy J. and Jeffrey G. Williamson (2005) *Global Migration and the World Economy;* two centuries of policy and performance, MIT University Press.

Friedman, Milton (1953) "The Case for Floating Exchange rates 'in Milton Friedman. Essays in Positive Economics. Chicago; University of Chicago Press pp 461-494.

Gardner, Richard N. (1956) Sterling-Dollar Diplomacy, Oxford, Oxford University Press.

Giovannini, Alberto (1993) "Bretton Woods and its Precursors: Rules versus discretion in the History of international monetary Regimes' in Michael Bordo and Barry Eichengreen (eds) A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform.

Chicago; University of Chicago Press.

Goetzmann, William (2016) *Money Changes Everything: How Finance Made Civilization*Possible. Princeton: Princeton University Press

Goldberg, Linda, Craig Kennedy and Jason Miu (2011), 'Central bank dollar swap lines and overseas dollar funding costs' *Economic Policy Review*, May, pp. 3-20.

Goodhart, Charles (2011) *The Basel Committee on Banking Supervision: A History of the Early Years*. Cambridge: Cambridge University Press.

Horsefield, J. Keith (1969) *The international Monetary Fund 1945-1965: twenty years of international monetary cooperation*, Washington, International Monetary Fund.

International Monetary Fund (2012) *The Liberalization and Management of Capital Flows – an Institutional View*, November 14. https://www.imf.org/external/np/pp/eng/2012/111412.pdf (accessed 9 October 2019).

Irwin, Douglas (2012) Trade Policy Disasters: Lessons from the 1930s. Cambridge: MIT Press

James, Harold (1996) *International Monetary Cooperation since Bretton Woods*, Washington: International Monetary Fund.

James, Harold (2001) *The End of Globalization: Lessons from the Great Depression*. Cambridge: Harvard University Press

Kaldor, Nicholas (1971) "Conflicts in National Economic Objectives" *Economic Journal* Vol 81 Number 321 (March): 1-16.

Keynes, John Maynard 1944) *Proposals for an International Clearing Union*John Maynard Keynes (1933) "National Self Sufficiency" Dublin: Educational company of Ireland

Keynes, John Maynard (1930), A Treatise on Money. London: MacMillan

Keynes, John Maynard (1925) The Economic Consequences of Mr. Churchill. London MacMillan

Keynes, John Maynard (1919) The Economic Consequences of the Peace. London MacMillan

Kindleberger, Charles (1975) *The World in Depression 1929-1939*. Berkeley: University of California Press

McCauley, Robert N. and Schenk, Catherine R. (2020) 'Central Bank Swaps Then and Now' mimeo.

McCauley, Robert N. and Schenk, Catherine R. (2015) 'Reforming the International Monetary System in the 1970s and 2000s: would an SDR substitution account have worked?', *International Finance*, 18(2), 2015, pp. 187-206.

McCauley, Robert N. (2016) 'Does the Dollar Confer an Exorbitant Privilege?' *Journal of International Money and Finance* 57, pp 1-14.

McKeown, Adam (2010), 'Chinese emigration in global context, 1850-1940', *Journal of Global History*, 5, pp. 95-124.

McKinnon, Ronald (2015) The Unloved Dollar Standard. New York: Oxford University press

Meltzer, Allan (2010), A History of the Federal Reserve. Volume 2. Chicago: University of Chicago Press

Milward, Alan (1999) *The European Rescue of the Nation State* Routledge. Berkeley: University of California Press

Nurkse, Ragnar (1944) International Currency Experience. League of Nations

O'Rourke, Kevin and Jeffrey G Williamson (1999) Globalization and History: The Evolution of a Nineteenth Century Atlantic Economy. Cambridge: MIT Press.

Moure, Kenneth (1996) 'Undervaluing the Franc Poincare', Economic History Review, 49(1).

Ostry, Jonathan D., Atish R. Ghosh, Karl Habermeier, Marcos Chamon, Mahvash Qureshi and Dennis Reinhardt (2010) Capital Inflows: The Role of Controls, IMF Staff Position Note, February 19. https://www.imf.org/external/pubs/ft/spn/2010/spn1004.pdf (accessed 9 October 2019)

Pauly, Louis W. (1996) 'The League of Nations and the Foreshadowing of the International Monetary Fund' *Essays in International Finance*, 201, December.

Piketty, Thomas (2016) *Capital in the Twenty First century*. Cambridge: Harvard University Press.

Pressnell, L.S. (1987) External Economic Policy Since the War Vol. 1: the Post-War Financial Settlement, London: HMSO.

Roberts, Richard (2013), Saving the City: The Great Financial Crisis of 1914. Oxford: Oxford University Press

Rockoff, Hugh (1984) "Some Evidence on the Real Price of Gold, Its Costs of Production and Commodity Prices "in A Retrospective on the Classical Gold Standard" (eds) Michael D Bordo and Anna J Schwartz. Chicago: University of Chicago Press

Rueff, Jacques (1967) "Increase the Price of Gold" in Lawrence H. Officer and Thomas D. Willett (eds) *The International Monetary System: problems and Proposals*. (ed), Englewood Cliffs, NJ: Prentice Hall.

Schenk, Catherine R. (2019), 'International Monetary Cooperation since the Global Financial Crisis' in C.R. Schenk and M. Klein, *IMF's Work on Encouraging International Policy Cooperation*, International Monetary Fund, BP/19-01/06.

Schenk, Catherine R. (2017) 'Coordination failures during and after Bretton Woods', in M. Qureshi, A. Ghosh ed., From Great Depression to Great Recession: The Elusive Quest for International Policy Cooperation, Washington: International Monetary Fund.

Schenk, Catherine R. (2014) 'Summer in the City: banking scandals of 1974 and the development of international banking supervision', *English Historical Review*, 2014, pp. 1129-1156.

Schenk, Catherine R. and John Singleton (2011) "Basket Pegs and Exchange Rate Regime Change: Australia and New Zealand in the mid-1970s" *Australian Economic History Review* 51(2) pp 120-149.

Schenk, Catherine R. (2010) *The Decline of Sterling: Managing the Retreat of An International Currency 1945-92.* Cambridge: Cambridge University Press.

Schenk, Catherine R. (2010b) 'The regulation of international financial markets from the 1950s to the 1990s' in S. Battilossi and J. Reis eds., *The State and Financial Systems in Europe and the USA: Historical Perspectives on Regulation and Supervision in the Nineteenth and Twentieth Centuries*, Ashgate, 2010. pp. 149-66.

Skidlesky, Robert (2009) Keynes: The Return of the Master. London: Penguin Press.

Silber, William (2007) When Washington Shut Down Wall Street: The Great Financial Crisis of 1914 and the Origins of America's Monetary Supremacy. Princeton: Princeton University Press.

Singleton, J. (2011) *Central Banking in the Twentieth Century*, Cambridge: Cambridge University Press.

Solomon, Robert (1982) *The International Monetary System 1945-1981*, New York: Harper and Row.

Steil, Benn (2013) *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order*, Princeton, Princeton University Press.

Taylor, John B (2007) "Housing and Monetary Policy" Remarks at the Federal Reserve Bank of Kansas City, Jackson Hole Economic Policy Symposium: Housing, Housing Finance, and Monetary Policy. August.

Peter Temin (1989) Lessons from the Great Depression. Cambridge: MIT Press.

Benn Steil (2018) The Marshall Plan: Dawn of the Cold War. New York: Simon and Schuster

Toniolo, Gianni (2005) *Central Bank Cooperation at the Bank for International Settlements*, Cambridge: Cambridge University Press.

Triffin, Robert (1960) *Gold and the Dollar Crisis*. New Haven: Yale University Press Edward Truman (2009)

Wheatley, Jonathan and Peter Garnham (2010) 'Brazil in 'currency war' alert', Financial Times, 27 September.

Williamson, Jeffrey G. (1996) "Globalization, Convergence and History" the *Journal of Economic History*. 56.02 277-306.

Zhou, Xiaochuan (2009) 'Reform the International Monetary System' 23 March, Bank for International Settlements Review https://www.bis.org/review/r090402c.pdf (accessed 9 October 2019)