"Respect the past so that you can understand the present and work on the future."

István Széchenyi

The Bretton Woods System as the Cornerstone of the United States' Hegemony*

Ágnes Solti®

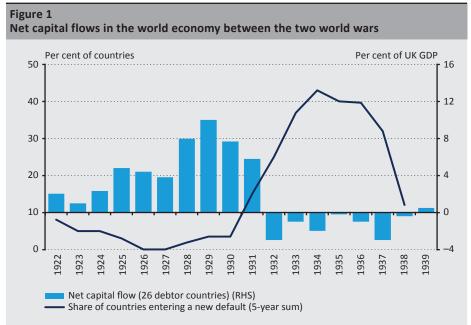
The Bretton Woods agreement was the most important milestone in the development of the financial system that characterised the new world order after the Second World War. Amidst the ongoing war, on 1 July 1944, 730 representatives from 44 Allied countries met at Bretton Woods to lay the foundations for a new international monetary regime after the end of the global conflict. It also meant a significant strengthening of the United States of America and the consolidation of the economic foundations of the Pax Americana. In this flashback, we focus on the shaping of US interests, the details of the Keynes-White debate and the long-term effects of the Bretton Woods system.

1. Precedents for the establishment of the post-World War II monetary system

In 1944, despite five years of war, the Great Depression of 1929–1933 was still deeply ingrained in the memory of economists, and the final consensus was that it was caused by the flow of so-called "hot money" (*Bernanke 1995*). Before the Great Depression, significant amounts of money flowed into securities that offered high short-term returns. The unequal capital flows not only led to an abundance of liquidity in the world's major economies (US, UK and Germany) (*Figure 1*), they also distorted the optimal level of leverage both in the corporate and the financial markets towards excessive risk-taking (*Postel-Vinay – Collet 2023*). For this reason, reducing the possibility of speculation in the capital markets was also a priority in US economic policy from the early 1930s onwards, leading to the adoption of the US Banking Act of 1933 (the Glass-Steagall Act).

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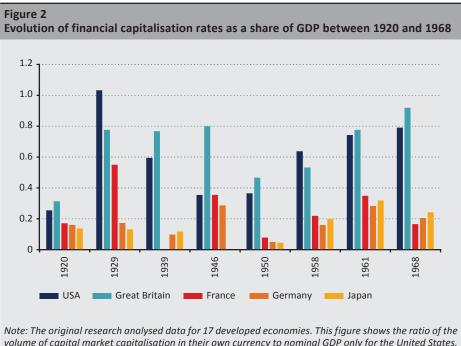
^{*} The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.



Note: The 8 creditor states: Belgium, France, Ireland, the Netherlands, Sweden, Switzerland, United Kingdom, United States of America. The 26 debtor states: Argentina, Australia, Bulgaria, Czechoslovakia, Canada, Denmark, Estonia, Finland, Germany, Greece, Hungary, India, Iraq, Italy, Japan, Latvia, Lithuania, the Netherlands Indies, New Zealand, Norway, Poland, Romania, South Africa, Turkey, Yugoslavia.

Source: Reinhart et al. (2020)

In response to the banking panic and sudden liquidity shortages that followed the bursting of the stock market bubble in 1929, economies turned towards protectionism. Exchange rates became unstable and the emerging currency war made it impossible to pursue a predictable monetary policy, while the lack of exchange rate stability further complicated fiscal stabilisation efforts. Therefore, economists viewed ensuring international control over speculative capital movements as the foundation for restoring a stable, multilateral financial system. This led to a rapid contraction of international capital flows from 1932 onwards, the consequences of which can be seen in the evolution of US capital market capitalisation as a share of GDP between the Great Depression and the Second World War (Figure 2).



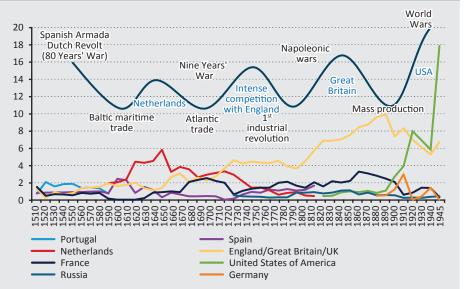
volume of capital market capitalisation in their own currency to nominal GDP only for the United States, the United Kingdom, France, Germany and Japan.

Source: Kuvshinov - Zimmermann (2022)

2. Great power motivations behind the new monetary order

The Bretton Woods arrangement, through the contributions of British economist John Maynard Keynes and American economist Harry Dexter White, can essentially be seen as an economic diplomatic struggle for global economic influence. The situation of the two states, which was crucial to the outcome of the negotiations, was very different. By this time, Britain's earlier great power status was already shaky: its global financial dominance had gradually been eroded by the financial burdens of the two world wars, and with the ongoing World War II, the situation of its Far Eastern colonial possessions had also become unstable. At the same time, the position of the United States had strengthened, as a result of its elevated manufacturing capacity and booming export performance since the 1870s, as well as its involvement in World War II (Figure 3). Although the UN conference was attended by 44 government delegations, the agreement adopted at the conference represented the resolution of the fundamental debate between the UK and US Treasury departments (Steil 2013).

Figure 3 Hegemony index changes in global power positions between 1500 and 1945 by economic and military power



Note: Economic power is calculated on the basis of gross domestic product per capita, while military power is calculated on the basis of the fleet of warships. The wavy line represents the so-called hegemonic sequence calculated by Kwon (2012), which examines the dominant powers of a given period in the context of economic innovation and major wars. In Kwon's reading, every hegemonic sequence begins with a war to promote ascendancy, and power is established by the social and technological innovations that form the basis of comparative advantage in the world economy. The availability of the data for each period is given in Tables 3 and 4 of the source study (Kwon 2011, pp. 605–607).

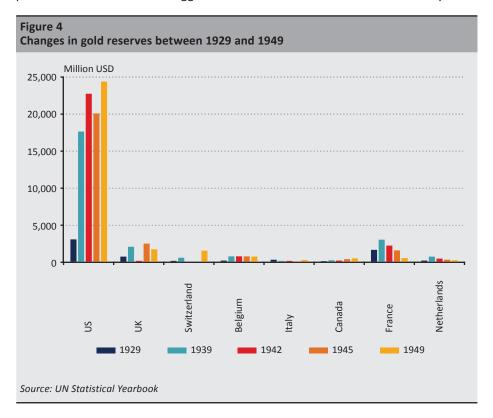
Source: Kwon (2011, 2012)

In this situation, the United States had the opportunity not only to achieve military victory but also to consolidate its role in the global economy by strengthening the US dollar's role in international trade. While the British pound started to decline, the dollar started to rise in the 1910s (*Karlstroem 1967*), thanks to the establishment of the Federal Reserve (1913) and the repeal of overseas bank branching regulations (*Greenwald 2020*). During the First World War, the US dollar was the only currency that remained linked to gold.

An integral part of the United States' agenda at Bretton Woods was to position New York as a global financial centre, taking away this role from London (*Kindleberger 1974*), and to achieve this the US identified the abolition of currency zones and the creation of US dollar hegemony as the first steps. One of the foundations of this plan concerning New York may have been that between 1929 and 1933 a significant amount of gold flowed into New York through the Federal Reserve's Gold Settlement

Fund from those US regions that were hit the hardest by the banking panic resulting from the Great Depression (*Bordo 2014*).

The United States was also in a favourable position compared to earlier great powers because it was the only major economy that had not suffered war damage. Moreover, it even experienced a boom thanks to the growth of military industries and had become one of the world's most important creditors. The latter is also illustrated by the flow of gold to the Western Hemisphere: according to the statistics of the *Bank for International Settlements (BIS 1944)*, Washington held 57 per cent of the global gold reserves in 1944 (*Figure 4*), while the huge amount of loans it provided to London further aggravated the situation of the British economy.



The US State Department was not caught off guard by the need to devise a new strategy: it began to plan the economic foundations of the European and Western order, based on its experience of building its hegemony in Latin America (*Domhoff 2020*). From 1939, with the involvement of private research institutes, including the Council on Foreign Relations (CFR), the so-called "War and Peace Studies" programme (WPS or "Studies of American Interests in the War and the Peace")

was developed in great secrecy. The starting point was the "Grand Area", initially consisting of the United States and the United Kingdom, based on the model followed during the establishment of US hegemony in Latin America (*Costigan et al. 2017*). In consolidating economic and monetary relations in the Western Hemisphere, capital flows were ensured under the military, economic and political control of the United States. As in the case of Bretton Woods, the foundations of the system were essentially built on the production and solvency of the United States. At home, among its citizens, the Washington government promoted the agreement to be concluded at the conference as if it were a job creation programme. This is partly the reason why the International Monetary Fund (IMF) included high employment and increasing real wages among its goals.

It was important for Washington to reduce Britain's global influence in the greatest possible extent and position itself as the sole great power. The existence of the British Empire would have been an increasing obstacle to the realisation of US post-war plans, especially as the oil reserves of the Middle East and Venezuela were under British influence (*Costigan et al. 2017*). At the same time, another factor that steered the United Kingdom towards consultation with the United States was that in 1940 Germany began to design a post-war European monetary system (*Iwamoto 1995*). The United Kingdom sought to respond to this, and the alternative monetary system to be created was formed under Keynes' direction (*Gross 2017*).

3. The main points of the Keynes–White debate

The different economic situations and economic historical experience of the United States and the United Kingdom brought different perspectives to the two ends of the negotiating table. While Keynes highlighted the problems of the 1920s (global liquidity shortages, inadequate global distribution of liquidity and rigid exchange rates), White was concerned with the challenges of the 1930s (competitive foreign exchange devaluations and unstable currencies) (*Boughton 2002*). Keynes stressed the need for a free exchange rate policy, while for White the importance of exchange rate stability was the top priority. Keynes also challenged the long-term viability of the parity system that had fixed the price of gold at USD 35 per ounce since 1934 (*Bordo 2017*).

At the same time, the US and the UK agreed that the international trading system could be based on a properly functioning global monetary system, which should be designed to avoid a return to the "excessively free" capital flows of the 1920s and 1930s, or the capital market speculation that directly caused the economic crisis, and to provide a corrective mechanism to deal with short-term balance of payments problems (*Ghosh – Qureshi 2017*). They also had a common interest in avoiding a repeat of the mistake of the Versailles peace treaties after the First World War,

in which politics settled borders, ignoring the financial and economic conditions of damage and reconstruction and the burden on the defeated states (*James 2012*).

As a precursor to the Bretton Woods Agreement, the first Keynes Plan in 1942 sought to attempt to eliminate the macroeconomic trilemma of the open economies by establishing an international clearing system, and proposed an international banking system to resolve to some extent the "impossible trinity" of free capital flows, independent monetary policy and a fixed exchange rate system. In the international monetary organisation proposed by Keynes, called the International Clearing Union, settlements between countries were to be entrusted to the central banks of the member states, along with the introduction of an international bank-money called the bancor. The latter was primarily intended to balance the trade account in order to eliminate the persistent deficit and related problems. The original idea was that the value of the bancor would have been fixed in gold (with the possibility of adjusting the conversion value). Keynes proposed a more flexible exchange rate regime than previously, in which exchange rates would be adjusted based on the trade balance (Szakolczai 2017). The system would have been cooperative through bancor settlements, as opposed to the export-oriented, asymmetric model, where the cost of adjustment is borne unilaterally by deficit countries (Abel 2019). Keynes also called for the creation of an international trade organisation to support this idea.

White emphasised the importance of stability of the international order rather than the primacy of national economic policy, and instead of advocating for a global banking system, fearing that the Keynesian plan might lead to uncontrolled lending, he proposed a stabilisation fund. He supported the idea of the gold-based system rather than the introduction of bancor, and due to the size of the US gold reserves, he preferred the use of the US dollar. Previously, the concept of the White plan had been tested in Latin America. After President Franklin D. Roosevelt announced the US strategy of Good Neighbor Policy in 1933 (fearing potential German expansion in the region) and a fundamental decision was made to establish the Inter-American Bank (IAB), intensive work began to institutionalise regional financial relations (Helleiner 2014). In this endeavour, White himself played an active role and under his leadership, a system of short-term loans to deal with exchange rate problems (which later became a cornerstone of the IMF), as well as the basis for long-term development loans (now managed by the International Bank for Reconstruction and Development, part of the World Bank Group) were soon developed. Washington's motivation was to support Latin American development goals in order to ensure that these countries would later provide a strong export market for US production and capital. The IAB outlined by White also had the explicit aim of strengthening the local industries, which was the basis for the long-term loans. Although the IAB proposal was not supported by the US Congress, the concept served as a model for the creation of the World Bank and later the Inter-American Development Bank (IDB).

Keynes's second draft of April 1943 (the "White Paper") was built on the idea that a clearing union would create symmetric adjustment, relieving deficit economies of their burden and thus continuing to emphasise the principle of fairness (*Szakolczai 2017*). Keynes argued for the need to put expansionist rather than contractionist pressure on world trade in order to restore growth (*Szakolczai 2018*). And he still envisaged the control of international capital movements remaining within a national framework. A significant change was that he finally abandoned the idea of the bancor in the context of the International Clearing Union, in favour of proposing currency zones.

In the end, the UK had to accept the system based on the members' capital subscription to the stabilisation fund instead of a clearing union, and also the general adoption of the gold exchange standard. In their "response", the United States and White continued to stress the importance of exchange rate stability and the establishment of bilateral convertibility. As a result of the 1944 agreement, the International Monetary Fund (IMF) was finally established in December 1945, and in 1946 the International Bank for Reconstruction and Development (IBRD), the first institution of the present World Bank Group, started its lending activities (*Szakolczai 2017*).

However, Keynes' bancor plan did not disappear without a trace. In the context of the financial technology advancements seen in recent years, there is an increasing emphasis the concept of a "single hegemonic currency" (SHC) within the context of central bank digital currency (CBDC) (*Tout 2023*). With regard to the model of CBDCs managed by multiple central banks, research has not yet found a conceptual model that better approximates it than the Keynesian bancor. Its main merit today remains in offering a symmetric and democratic system that can provide liquidity to any of its members at any time in a sustainable way, i.e. ensuring international balance between countries (*Rahman 2022*).

4. Hungarian evaluation of the plans as of early 1944

Developments in the negotiations in New Hampshire were also followed in Hungary. A related study by *József Judik*, an economist and former staff member of the Magyar Nemzeti Bank (1925–1937), was published in January 1944 in *Közgazdasági Szemle*. In it, he stated that the Hungarian quota to be paid into the Keynesian Clearing Union would have been 740 million pengő, but only one quarter of this amount, i.e. 185 million pengő, could have been drawn without limit (*Judik* 1944).

According to Judik, the potential amount Hungary would have received under the Clearing Union would have barely satisfied the initial needs. In his study entitled "A Keynes- és White-terv" (The Keynes and White Plan), he compared the amount of one quarter of the quota with the highest (1928: 411 million pengő) and lowest

(1933: 112 million pengő) actual gold and foreign exchange holdings, and the largest annual decreases (1927–1928: 108 million pengő) registered by the Magyar Nemzeti Bank since its foundation (1924). Judik added one quarter of the quota to the level of the foreign exchange stock at that time (1943: roughly 160 million pengő) and found that the aggregate was below the 1925–1928 level, especially considering the price increases compared to the pre-war period.

In his study, primarily based on the developments of April and July 1943, Judik also attempted to calculate the quota of the international stabilisation fund under the White Plan. Based on pre-World War II figures, the Hungarian quota in this case would have been 200 million pengő, which was close to the amount that could be drawn down freely under the Keynes plan. Judik notes that under the White plan, any borrowing exceeding 30 per cent of this quota (roughly 60 million pengő) would also entail obligations such as granting influence to the fund over the domestic economic policy. He further stresses that upon entry, an equivalent amount of gold reserves were to be transferred to the fund.

Judik concluded that in the case of small countries like Hungary, the Keynes plan would have been preferable to the White plan. In his opinion, the Keynes plan would have been better than the US proposal in terms of the settlement of international payments and the replenishment of gold and foreign exchange reserves, which had been depleted during the world war. He pointed out that, unlike the Keynesian plan, in the case of the White plan the financial assistance to weaker economies would not have been automatic, and that in the event of a balance of payments problem, the stabilisation fund would have put more pressure on the debtor countries (*Judik 1944*).

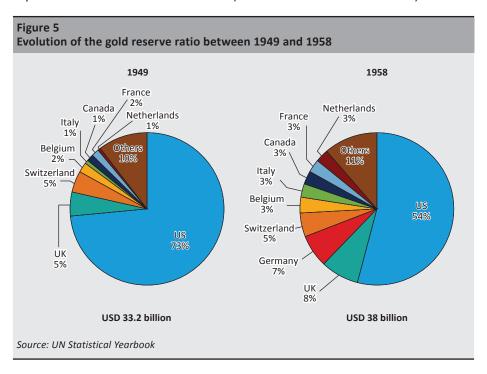
5. The forces that overturned the Bretton Woods system

The new international monetary system established at the Bretton Woods conference departed in several respects from the gold standard system of the pre-World War I period and the gold exchange standard of the interwar period. In the dollar-based system, the relationship between the United States and other countries became asymmetric: countries outside the US were obliged to adjust fixed exchange rates to maintain equilibrium. On the other hand, central banks other than the Federal Reserve were not bound by the obligation to convert to gold. One striking difference compared to the period 1879–1914 was the restriction on the free movement of capital. Another feature of the system is that from the 1960s onwards cooperation between central banks began to take root, with swap agreements as the backbone of this cooperation (*McCauley – Schenk 2020*).

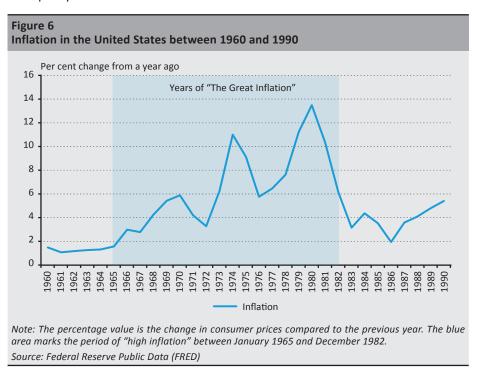
However, the shortcomings of the system soon became apparent in practice. Already in 1947, the Marshall Plan was set up and action had to be taken to alleviate the international dollar shortage. Bretton Woods was also challenged by the creation of

the European Payment Union (EPU) in 1950, based on Keynesian theory, to ensure the convertibility of Western European currencies (*Faudot 2020*). Without a common reserve currency, the EPU functioned as an international clearing house, so the United States considered this initiative that existed until 1958 (i.e. until the establishment of full convertibility at Bretton Woods) as a challenger to the IMF (*James 1996*).

An unexpected turn of events for the United States was that foreign central banks began replenishing their gold reserves relatively quickly (*Figure 5*). The subsequent development of gold reserves was also seen as a negative development by the United States because in the initial years following the agreement, the dollar's importance was increased by the fact that a significant part of European gold reserves was transferred to the United States. According to contemporary data from the St. Louis Fed, between January 1946 and March 1948 alone, USD 4.9 billion (roughly USD 50.7 billion at 2023 prices) worth of gold went to the United States from foreign governments. Meanwhile, the level of gold reserves in the future Marshall countries fell by USD 2.3 billion between 1946 and 1947 (USD 25.3 billion at 2023 prices) in favour of the United States (*Federal Reserve Bulletin 1948*). This allowed the new US financial centres to (partially) take over the management of capital flows between the two continents. This reinforced the process whereby the United States had already rapidly increased its share of global capital market capitalisation between 1880 and 1930 (*Kuvshinov – Zimmermann 2022*).



However, the system that had consolidated the favourable position of the US was soon threatened by the growing competitiveness of Japan and Germany, and it collapsed in the early 1970s. Bretton Woods was in fact supposed to have come into operation when the reconstruction of Europe was already underway with the help of the United States, although experience showed that while the mechanism was useful during reconstruction, from the 1960s onwards it was only held together by necessity. The main reason for the change was the different economic situation: in the 1960s the United States had to compete with its growing competitors at an initial disadvantage because of its obligations towards the Bretton Woods system, since its currency was the anchor of the system (James 1996). This situation was exacerbated by the fact that the United States experienced an inflationary impact from the mid-1960s onwards, mainly due to the financing of the Vietnam War and the Great Society initiative (Figure 6), which already reduced the purchasing power of the dollar, while in the case of the gold it remained unchanged, thus upsetting their parity.



While central bank swap arrangements were a cohesive force in the system, the growing dollar claims of foreign countries began to put a strain on it. According to Fed data, the claims of foreign central banks exceeded the US gold reserves as early as 1965 (*Figure 7*).

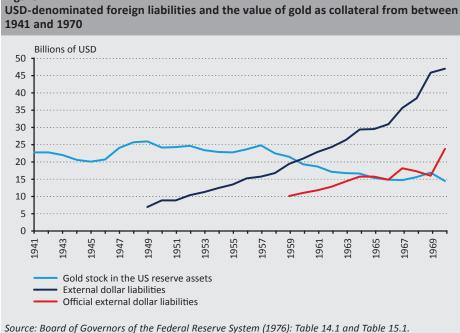
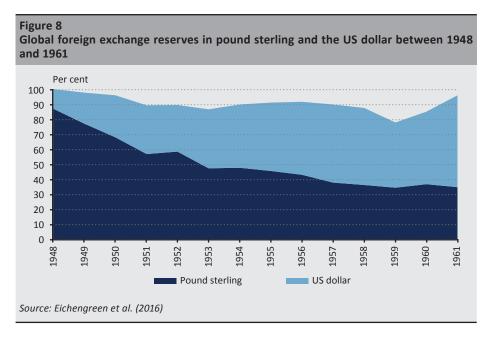


Figure 7

By the early 1960s, the eurodollar market had also been consolidated, taking advantage of the Bretton Woods system and its loopholes to alleviate the international dollar shortage. This reinforced the trend initiated by the Q legislation adopted as part of the Glass-Steagall Act of 1933, which among other things, limited the interest rate on deposits and imposed a reserve requirement on domestic deposits. This encouraged US banks to account for large deposits as foreign, which in turn supported the creation and international development of money market funds (Gilbert 1986). The UK's economic and diplomatic situation, including high inflation and the Suez crisis, led to restrictions on sterling lending to protect its international reserves and prompted London banks to prioritise dollar savings in terms of foreign lending. Ironically, the strengthened eurodollar market also played a major role in the collapse of the Bretton Woods system (Restrepo-Echavarría – Grittayaphong 2022).

However, the "death" of the dollar standard did not mean the end of the dollar's hegemony. The Bretton Woods Agreement consolidated the role of the US dollar in international credit and trade transactions, as well as in foreign exchange reserve accumulation (Eichengreen et al. 2016), and the dollar became the basis of the international financial system (Figure 8). This was complemented by two important factors: on the one hand, the United States was able to support the maintenance of its global economic hegemony through the IMF, and on the other hand, the economic and military agreement signed by the US and Saudi Arabia in June 1974 (*Vicquéry 2022*) also contributed to the further strengthening of the dollar's global position, establishing the USD-based settlement of oil trade transactions, and thus the petrodollar system at the global level.



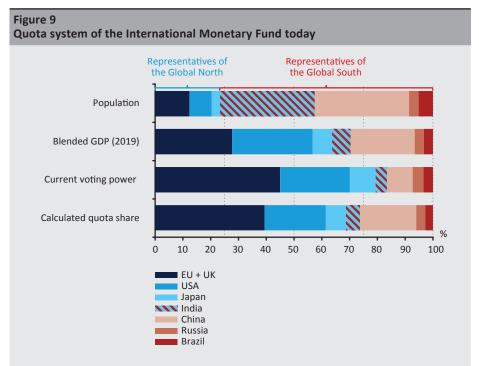
The cost-benefit analysis of the Bretton Woods system is a divisive topic in the literature. According to some of the research, maintaining the system involved a sacrifice for the US and the global economy if we look at the consumption side of the issue. In an examination of the effects of the Bretton Woods agreement, the St. Louis Fed concluded that the system brought welfare gains, at least in terms of consumption growth, for Northern and Western Europe, as well as East Asia, Latin America, Canada, Australia and New Zealand. By contrast, in the United States, participation in the regime led to a 4.5 per cent drop in consumption. Their analytical model also showed that without the Bretton Woods system global output would have been higher than it actually was (*Cancelada 2022*).

Other analyses point out that, as far as the United States is concerned, some actors are winners (Wall Street) and others are losers (such as US workers and companies in the real economy) in a system based on the international dominance of the dollar (e.g. *Pettis 2023*).

As one of the lasting legacies of the Bretton Woods system, the US Federal Reserve still has a special international role (*Báger 2017*). With the 1944 agreement, it took over the former function of the Bank of England: as long as the Bank of England

was able to fulfil the role of lender of last resort in the world economy, the United Kingdom was the central actor in the international monetary and financial system. After the First World War, it became clear that this role could only be filled by the Fed. This also explains why a single, comprehensive global monetary system could not have functioned during the interwar period.

However, the post-World War II system is not sufficiently equitable: today, an increasing number of developing and emerging economies are expressing the view that the international financial system is determined by US domestic interests, and they continue to see the most effective solution as central banks increasing and diversifying their international reserves (*Choi 2023*). Discontent with this is also behind the calls for reform of the IMF and the World Bank Group, which were established by the Bretton Woods agreement. The quota system of the globally influential lending institutions continues to reflect the global leadership of the United States, which is a source of increasing dissatisfaction at the international level (*Figure 9*).



Note: In addition to the current voting power, the IMF periodically calculates the so-called "calculated quota share", which represents an approximate value based on the real economic weight of a member country, calculated using fresh data, and which can be taken into account during a forthcoming quota review. The calculation of "blended GDP" compresses GDP adjusted for exchange rate fluctuations and purchasing power parity into an adjusted value. In this study, we consider the "calculated quota share" as the potential voting power of a country. More information on definitions: https://www.imf.org/external/np/spr/glossary.pdf

Source: IMF (as of September 2023)

6. Conclusion

The preparation of the Bretton Woods Agreement was an important moment for the protection of US foreign policy and foreign economic interests and the implementation of long-term US strategy. For the United States, it was a fundamental objective to spearhead the financing of reconstruction for its wartime allies and to enforce the Monroe doctrine (the policy of "America for Americans") in Latin America to exclude foreign influence. A further motivation, as the supporter of developing countries, was to expand this alliance network, and at the same time the external market. The so-called Bretton Woods twins, the IMF and today's World Bank, as the institutionalised executors of the agreement, also supported the achievement of these goals in a previously unprecedented international monetary cooperation. And although the regime – after the US changed from a low-inflationary to a high-inflationary economy during the "Great Inflation" and the changes in the global economic environment overturned the model based on a fixed exchange rate regime and international restrictions on capital flows – was abolished in the early 1970s, the legacy of the US dollar standard system lacking gold parity continues to define global financial conditions.

In the context of the international system as a whole, the creation of the agreement can also provide a relevant lesson for today's economic diplomacy: the 44 participating countries acted swiftly and spared no resources in addressing a common problem, namely the restoration of the international monetary regime. In 1944, world leaders could not yet foresee how economic trends would evolve after the war, or whether the challenges of the post-World War I era would be repeated. At the same time, learning from the economic policy and diplomatic mistakes of the interwar period, a clear objective was set in 1944 to guarantee financial and economic stability, accepting the economic realities of the time. Although today we are witnessing a slowdown in globalisation, the world is still much more complex than it was 80 years ago because of the economic interdependence, and thus multilateralism in global affairs needs to be strengthened. The closing speech of US Secretary of the Treasury Henry Morgenthau at the 1944 conference conveyed a message that remains relevant to this day: "We have come to recognize that the wisest and most effective way to protect our national interests is through international cooperation — that is to say, through united effort for the attainment of common goals" (Morgenthau 1944:2). The reform of the international institutions is now essential: as the example of the Bretton Woods system shows, without a fair system that keeps pace with the development of the world economy, it is difficult to build lasting cooperation.

References

- Ábel, I. (2019): The Global Economy is in Danger: On the Book of György Szakolczai through the Lens of Post-Keynesian School. Financial and Economic Review, 18(4): 157–165. https://en-hitelintezetiszemle.mnb.hu/letoltes/fer-18-4-br3-abel.pdf
- Báger, G. (2017): Operation of the International Monetary and Financial System Structural Tensions of a "Non-system". Financial and Economic Review, 16(4): 151–186. https://doi.org/10.25201/FER.16.4.151186
- Bernanke, B.S. (1995): *The Macroeconomics of the Great Depression: A Comparative Approach.* Journal of Money, Credit and Banking, 27(1): 1–28. https://doi.org/10.2307/2077848
- BIS (1944): Fourteenth Annual Report 1 April 1943 31 March 1944. https://www.bis.org/publ/arpdf/archive/ar1944 en.pdf
- Board of Governors of the Federal Reserve System (1976): *Banking and Monetary Statistics* 1941–1970. https://fraser.stlouisfed.org/files/docs/publications/bms/1941-1970/BMS41-70 complete.pdf?utm source=direct download
- Bordo, M.D. (2014): *Tales from the Bretton Woods*. Workshops Proceedings of OeNB Workshops: Bretton Woods@70: Regaining Control of the International Monetary System, pp. 66–77. https://www.econstor.eu/handle/10419/264853
- Bordo, M.D. (2017): *The Operation and Demise of the Bretton Woods System; 1958 to 1971*. NBER Working Paper 23189. https://doi.org/10.3386/w23189
- Boughton, J.M. (2002): Why White, Not Keynes? Inventing the Postwar International Monetary System. IMF WP/02/52. https://doi.org/10.5089/9781451847260.001
- Cancelada, G. (2022): The Ghost of Bretton Woods Still Haunts the Global Economic System. https://www.stlouisfed.org/open-vault/2022/oct/ghost-bretton-woods-global-economic-system
- Choi, J. (2023): *BSP governor says Fed should be 'more caring*'. Central Banking, 12 April. https://www.centralbanking.com/central-banks/monetary-policy/international/7958476/bsp-governor-says-fed-should-be-more-caring
- Costigan, T. Cottle, D. Keys, A. (2017): *The US Dollar as the Global Reserve Currency: Implications for US Hegemony*. World Review of Political Economy, 8(1): 104-122. https://doi.org/10.13169/worlrevipoliecon.8.1.0104
- Domhoff, G.W. (2020): *The Corporate Rich and the Power Elite in the Twentieth Century.*Routledge Taylor and Francis Group.

- Eichengreen, B. Chiţu, L. Mehl, A. (2016): *Stability or Upheaval? The Currency Composition of International Reserves in the Long Run*. IMF Economic Review, 64(2): 354–380. https://doi.org/10.1057/imfer.2015.19
- Faudot, A. (2020): The European Payments Union (1950–58): the Post-War Episode of Keynes' Clearing Union. Review of Political Economy, 32(3): 371–389. https://doi.org/10.1080/09538259.2020.1776959
- Federal Reserve Bulletin (1948): *The Postwar Drain on Foreign Gold and Dollar Reserves*. FDB, 34(4): 371–381. https://fraser.stlouisfed.org/files/docs/publications/FRB/pages/1945-1949/30033_1945-1949.pdf
- Federal Reserve Public Data (FRED): Consumer Price Index for All Urban Consumers. https://fred.stlouisfed.org/series/CPIAUCSL
- Ghosh, A.R. Qureshi, M.S. (2017): From Great Depression to Great Recession: The Elusive Quest for International Cooperation. International Monetary Fund. https://doi.org/10.5089/9781513514277.071
- Gilbert, R.A. (1986): Requiem for Regulation Q: What It Did and Why It Passed Away. St. Louis Fed. https://doi.org/10.20955/r.68.22-37.zge
- Greenwald, M.B (2020): *The Future of the United States Dollar: Weaponizing the US Financial System*. Atlantic Council Geoeconomics Center. https://www.atlanticcouncil.org/wp-content/uploads/2020/12/The-Future-of-the-US-Dollar-Report-web-v3.pdf
- Gross, S.G. (2017): Gold, Debt and the Quest for Monetary Order: The Nazi Campaign to Integrate Europe in 1940. Contemporary European History, 26(2): 287–309. https://doi.org/10.1017/S0960777317000078
- Helleiner, E. (2014): Southern Pioneers of International Development. Global Governance, 20(3): 375–388. https://doi.org/10.1163/19426720-02003004
- Iwamoto, T. (1995): *The Keynes Plan for an International Clearing Union Reconsidered*. Kyoto University Economic Review, 65(2 (139)): 27–42. http://www.jstor.org/stable/43217486
- James, H. (1996): *International Monetary Cooperation Since Bretton Woods*. Oxford University Press. https://doi.org/10.5089/9781475506969.071
- James, H. (2012): *The multiple contexts of Bretton Woods*. Oxford Review of Economic Policy, 28(3): 411–430. https://doi.org/10.1093/oxrep/grs028
- Judik, J. (1944): A Keynes- és White-terv (The Keynes and White plan). Közgazdasági Szemle (Economic Review), 87(1–2): 1–27. https://real-j.mtak.hu/5833/1/KozgazdasagiSzemle_1944.pdf

- Karlstroem, B.S. (1967): *How Did They Become Reserve Currencies?* IMF, Finance & Development, Vol. 4: Issue 3. https://doi.org/10.5089/9781616352875.022
- Kindleberger, C.P. (1974): *The Formation of Financial Centers: A Study in Comparative Economic History*. Princeton University. https://ies.princeton.edu/pdf/S36.pdf
- Kuvshinov, D. Zimmermann, K. (2022): *The Big Bang: Stock Market Capitalization in the Long Run.* Journal of Financial Economics, 145(2, Part B): 527–552. https://doi.org/10.1016/j. jfineco.2021.09.008
- Kwon, R. (2011): Hegemonies in the World-System: An Empirical Assessment of Hegemonic Sequences from the 16th to 20th Century. Sociological Perspectives, 54(4): 593–617. https://doi.org/10.1525/sop.2011.54.4.593
- Kwon, R. (2012): *Hegemonic Stability, World Cultural Diffusion, and Trade Globalization*. Sociological Forum, 27(2): 324–347. https://doi.org/10.1111/j.1573-7861.2012.01320.x
- McCauley, R.N. Schenk, C.R. (2020): *Central bank swaps then and now: swaps and dollar liquidity in the 1960s*. BIS Working Papers No 851. https://www.bis.org/publ/work851.pdf
- Morgenthau, H. (1944): Address by the Honorable Henry Morgenthau, Jr., at the Closing Plenary Session (July 22, 1944). https://www.cvce.eu/content/publication/2003/12/12/b88b1fe7-8fec-4da6-ae22-fa33edd08ab6/publishable_en.pdf
- Pettis, M. (2023): *The High Price of Dollar Dominance*. Foreign Affairs, 30 June. https://www.foreignaffairs.com/united-states/high-price-dollar-dominance
- Postel-Vinay, N. Collet, S. (2023): Hot money inflows and bank risk-taking: Germany from the 1920s to the Great Depression. The Economic History Review, 77(2): 472–502. https://doi.org/10.1111/ehr.13277
- Rahman, A.A. (2022): A Decentralized Central Bank Digital Currency. MPRA Paper. https://doi.org/10.33774/coe-2022-3t83l-v2
- Reinhart, C. M. Reinhart, V. Trebesch, Ch. (2020): Capital Flow Cycles: A Long, Global View. Economica Coase—Phillips Lecture London School of Economics, May 28. https://www.lse.ac.uk/Events/Events-Assets/PDF/2020/02-ST/20200528-Carmen-M.-Reinhart.pdf
- Restrepo-Echavarría, P. Grittayaphong, P. (2022): *Bretton Woods and the Growth of the Eurodollar Market*. St. Louis Fed https://www.stlouisfed.org/on-the-economy/2022/january/bretton-woods-growth-eurodollar-market
- Steil, B. (2013): The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White, and the Making of a New World Order. Princeton University Press. https://doi.org/10.2307/j. ctt1r2dxv

- Szakolczai, Gy. (2017): Keynes és White szerepe a Nemzetközi Valutaalap létrehozásában és a Bretton Woods-i értekezlet (The role of Keynes and White in founding the International Monetary Fund and at the Bretton Woods conference). Közgazdasági Szemle (Economic Review), 87(1): 74–96. https://doi.org/10.18414/KSZ.2017.1.74
- Szakolczai, Gy. (2018): John Maynard Keynes, a nemzetközi gazdaság keynesi rendje és a Nemzetközi Valutaalap (John Maynard Keynes, the Keynesian order of the international economy and the International Monetary Fund). Közgazdasági Szemle Alapítvány. https://real-d.mtak.hu/1192/11/dc_1571_18_doktori_mu.pdf
- Tout, E. (2023): Plans for a fictitious world: Keynes's global bank and currency. LSE Blogs, 10 March. https://blogs.lse.ac.uk/economichistory/2023/03/10/keynes-global-bank-and-currency/
- Vicquéry, R. (2022): *The Rise and Fall of Global Currencies over Two Centuries*. WP 882, Banque de France. https://doi.org/10.2139/ssrn.4205564