

# Was the Bretton Woods system bound to fail?

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## I. Introduction

In the aftermath of World War 2, the US Treasury hosted an international conference at the Mount Washington Hotel in Bretton Woods, to negotiate an international monetary system to foster post-war recovery and stable economic growth. At the heart of this system was a fixed exchange rate mechanism, based on cooperation between central banks. After the interwar period, countries around the world were deeply concerned about a return of devaluation policies and currency speculation (though recent studies have since found speculation to be an insignificant factor on devaluations of the interwar era).<sup>1</sup> UK authorities were also particularly concerned about a US return to protectionist policies.<sup>2</sup> The unfettered capital flows of the interwar era had become fundamentally inconsistent with a liberal international trade regime and the macroeconomic management increasingly expected of governments (namely, full employment).<sup>3</sup> A broad consensus emerged that fixed exchange rates would solve all of these problems,<sup>4</sup> and the Articles of Agreement were finalised in 1944 and implemented in 1946.

To explain why the collapse of Bretton Woods was inevitable, this essay will examine two potential failure points facing the system: the liquidity problem (the threat of global deflation) and the confidence problem (the threat of a run on US gold reserves). These two problems were famously described by the economist Robert Triffin and are commonly referred to as the Triffin Dilemma. Because US gold reserves could not increase fast enough to meet the demand for international liquidity, the US faced two conflicting objectives. It could either cease the provision of international liquidity, which would lead to international deflation and a severe contraction of economic growth, or continue providing liquidity, and risk undermining credibility of the dollar. Triffin believed that when US foreign liabilities surpassed US gold cover, a run on the dollar would ensue and the US would be forced to suspend convertibility.<sup>5</sup>

The collapse of Bretton Woods was inevitable, and quite similar to the ending Triffin had envisaged, if a little later than he predicted. Whilst the US and an alliance of central banks were able to resolve the liquidity problem, various attempts to address the confidence problem all

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<sup>1</sup> Barry Eichengreen, "Did speculation destabilize the French Franc in the 1920s?" *Explorations in Economic History*, 19, no.1 (1982): 71-100.

<sup>2</sup> Allan Meltzer, "U.S. Policy in the Bretton Woods Era." *Review - Federal Reserve Bank of St. Louis*, 73, no. 3 (May, 1991): 55-56.

<sup>3</sup> Atish Ghosh, and Mahvash Qureshi, "What's In a Name? That Which We Call Capital Controls." *IMF Working Paper*, 16, no. 25 (2016): 15.

<sup>4</sup> Tobias Straumann, *Fixed ideas of money: small states and exchange rate regimes in twentieth century Europe* (Cambridge: Cambridge University Press, 2010), 3-4.

<sup>5</sup> Robert Triffin, "Gold and the dollar crisis: the future of convertibility." *Essays in International Finance*, no. 132 (1960): New Jersey, Princeton University.

failed. Monetary authorities could not defend the international credibility of the dollar, and so the Bretton Woods system was bound to fail.

## II. The Bretton Woods System

The Bretton Woods system saw the return of fixed exchange rates, but unlike the preceding Gold Standard from 1870-1914 it bore important differences. Adherence to the Gold Standard was driven by market forces; exchange rate stability acted as a ‘good housekeeping seal of approval’ by facilitating cheaper access to foreign capital markets.<sup>6</sup> The Bretton Woods system was instead based on cooperation between central banks, facilitated and overseen by the newly established International Monetary Fund (IMF). Central banks required resources to carry out open market interventions to stabilise exchange rates, and the IMF provided liquidity to economies holding insufficient reserves.

The value of the dollar was pegged to gold at \$35 per ounce, with other currencies in turn pegged to the dollar within 1% margins to allow for minor fluctuations.<sup>7</sup> For countries facing perpetual current account deficits, the new system also offered greater flexibility for exchange rates than the Gold Standard. Such countries were permitted to devalue their currencies, under supervision from the IMF, though the conditions for a ‘fundamental disequilibrium’ remained ambiguous.<sup>8</sup>

Another important difference of the Bretton Woods system was the preservation of monetary autonomy for member states. Under a fixed exchange rate mechanism with free capital flows, a central bank cannot adjust interest rates or increase the money supply without affecting the exchange rate.<sup>9</sup> This had been sacrificed during the Gold Standard era in favour of capital mobility. However, in 1945, with decolonisation on the rise and economists keen to foster cooperative growth, it was now capital mobility that would be sacrificed in return for monetary autonomy. Countries were now permitted, and in some cases even encouraged, to impose controls on capital account transactions.<sup>10</sup>

The Bretton Woods System operated for 25 years, presiding over an impressive post-war recovery in Europe and almost a complete absence of banking and currency crises amongst its member states.<sup>11</sup> However, by the mid-1960s the system was beginning to wane. Confidence in the dollar had dramatically declined, and the US faced a persistent run on its gold reserves. In 1971 Richard Nixon suspended convertibility of the dollar and by 1973 all other major economies had followed, thus drawing the Bretton Woods system to a close.<sup>12</sup>

## III. The liquidity problem

The first potential failure point of the Bretton Woods system was liquidity. Due to the political security and sheer economic superiority of the US, and contrary to the intention of its

<sup>6</sup> Michael Bordo and Hugh Rockoff, “The Gold Standard as a ‘Good Housekeeping Seal of Approval.’” *The Journal of Economic History*, 56, no. 2 (1996): 389–428.

<sup>7</sup> Meltzer, “US Policy”, 55-56.

<sup>8</sup> Paul Kugler and Tobias Strauman, “International Monetary Regimes: The Bretton Woods System.” *Handbook of the History of Money and Currency* (2018): 1-4.

<sup>9</sup> Robert Mundell, “Capital mobility and stabilization policy under fixed and flexible exchange rates”. *Canadian Journal of Economics and Political Science*, 29, no. 4 (1963): 475–485; John Flemming, “Domestic financial policies under fixed and floating exchange rates”. *IMF Staff Papers*, 9 (1962): 369–379.

<sup>10</sup> Kugler et al, “International Monetary Regimes”, 3.

<sup>11</sup> Michael Bordo and Christopher Meissner, “Growing Up to Stability? Financial Globalization, Financial Development, and Financial Crises.” *National Bureau of Economic Research*, Working Paper, 21287 (2015): 52.

<sup>12</sup> Kugler et al, “International Monetary regimes”, 2.

architects, the Bretton Woods exchange rate mechanism emerged as a ‘gold dollar standard’.<sup>13</sup> The US became a major exporter during WW2, enjoying a significant current account surplus and acquiring around 75% of global gold reserves by 1945.<sup>14</sup> Being freely convertible, the dollar therefore became a reserve asset for other central banks *in lieu* of gold.<sup>15</sup> In the early years the IMF operated almost exclusively on US resources,<sup>16</sup> acting as a credit union in which members could withdraw more than their original deposits.<sup>17</sup> The World Bank, its partner organisation, also provided similar support to developing currencies. Initially, only the IMF was intended to provide temporary relief for economies facing current account deficits, but in the aftermath of WW2, with European economies in ruin and the spread of communism on the rise, the US undertook what many consider to be its most effective foreign aid program: the European Recovery Programme, or ‘Marshall Plan’.<sup>18</sup> Most of this funding would come from the US Treasury.<sup>19</sup>

From 1948-51, the US provided a series of loans and grants to European economies, accompanied by conditions and policy recommendations. The primary goal was to expand agricultural and industrial production, and then to increase international trade by utilising the stability of the fixed exchange rate mechanism.<sup>20</sup> Recipient countries were even encouraged to increase exports to the US, whilst restricting their imports. Reducing current account deficits, and rebuilding central bank reserves, was a crucial step to achieve international current account convertibility. Though the programme formally ended in 1951, and despite recurring European trade deficits, military expenditure and aid packages continued, amounting to a flow of \$2 billion a year.<sup>21</sup> European Common Market policies also increased international trade, which stipulated further private investment from the US.<sup>22</sup>

It took nearly 15 years before the Bretton Woods system became fully operational. By that time (1959) the US had effectively replaced the IMF’s role in providing international liquidity.<sup>23</sup> Demand management policies had proved ineffective at reducing international imbalances and by 1960 the US, despite still enjoying a trade surplus, now held around 50% of global gold reserves, due to its capital account deficits.<sup>24</sup> It was in this year that Robert Triffin published his first article, ‘Gold and the Dollar Crisis: the Future of Convertibility’, highlighting the inevitable danger of the persistent decline of US gold reserves.

Triffin argued that because the supply of US foreign liabilities (dollars) had increased faster than gold stocks, foreign claims would eventually surpass US gold cover. The US was already unable to lower interest rates without triggering a further outflow of gold, and when liabilities surpassed its reserve cover it would surely face a run on gold.<sup>25</sup> On the other hand, if central banks did not have sufficient liquidity they would be unable to stabilise their exchange

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<sup>13</sup> Christoffer Zoeller, “Closing the Gold Window: The End of Bretton Woods as a Contingency Plan.” *Politics & Society*, 47, no. 1 (2019): 6.

<sup>14</sup> Meltzer, “US Policy”, 56.

<sup>15</sup> Kugler et al, “International Monetary Regimes”, 1-4.

<sup>16</sup> Robert Asher, “Multilateral Versus Bilateral Aid: An Old Controversy Revisited”. *International Organization*, 16, no. 4 (1962), 697.

<sup>17</sup> Michael Bordo, Eric Monnet and Alain Naef, “The Gold Pool (1961–1968) and the Fall of the Bretton Woods System: Lessons for Central Bank Cooperation”. *The Journal of Economic History*, 79, no. 4 (2019): 1031.

<sup>18</sup> Curt Tarnoff, “The Marshall Plan: Design, Accomplishments, and Significance.” *Congressional Research Service* (2018), 1. f

<sup>19</sup> Seymour Harris, “Cost of the Marshall Plan to the United States.” *The Journal of finance*, 3, no. 1 (1948): 1-15.

<sup>20</sup> Tarnoff, “The Marshall Plan”, 1-6.

<sup>21</sup> Meltzer, “US Policy”, 57-58.

<sup>22</sup> Bordo et al, “The Gold Pool”, 1031.

<sup>23</sup> Bordo et al, “The Gold Pool”, 1031.

<sup>24</sup> Meltzer, “US Policy”, 56.

<sup>25</sup> Triffin, “Gold and the Dollar Crisis”.

rates. John Maynard Keynes had foreseen this problem, and during the initial negotiation phase with Harry Dexter White proposed a clearing mechanism in which surplus current account economies would lend to deficit economies, enforced by a system of penalties.<sup>26</sup> However, this policy was never enforced, and as foreign claims approached the level of US gold cover Triffin believed the US would have to choose between providing international liquidity and maintaining credibility of the dollar.<sup>27</sup>

By the early 1960s, policy makers were far more concerned with the liquidity problem than the confidence problem. A consensus emerged that international imbalances could be corrected after a period of strong economic growth and the expansion of international trade. Policy makers were concerned that immediate lending from surplus countries (still in the midst of recovery) might undermine their employment levels, and only risk further devaluations.<sup>28</sup> In this sense, the US could best preserve confidence in the dollar by continuing to provide liquidity, and the strategy seemed to work. US foreign liabilities surpassed gold reserve cover in 1964, and whilst gold prices did increase on the London market there was no frenzied run on the dollar that Triffin had expected.<sup>29</sup> The international monetary system was now based on fractional reserve banking.

However, the decline of US gold reserves did not cease as policy makers had hoped for. In the face of either an impending liquidity or confidence problem, the US took two drastic steps to increase global liquidity. It had already expanded IMF member quotas by 50% in 1959, and it did so again by 25% in 1967. This was accompanied by a promise of further liquidity from the Group of 10 (G10, the 10 largest member economies), should the Fund require it. The second policy was the creation of a new reserve asset: Special Drawing Rights (SDRs). These new bills were equivalent to the gold content of one dollar, and first became available in 1969. SDRs could not be held by private parties and were instead used to facilitate payments between central banks.<sup>30</sup> It would therefore seem Triffin was wrong. By 1970 the world was actually suffering from a surplus of liquidity, and inflation posed a greater risk than deflation. International markets and central banks had enough faith in the Bretton Woods model of economic growth to continue using the dollar, despite knowing that only a fraction of the currency was backed by gold.

However, confidence in the dollar was waning throughout the 1960s, and the US faced a persistent run on its gold reserves. This would eventually lead Nixon to suspend dollar convertibility in 1971.

#### **IV. The confidence problem**

Whilst liquidity posed a threat to the Bretton Woods system, it was the inability of monetary authorities to maintain confidence in the dollar that made collapse of the fixed exchange rate regime inevitable.

The issue of confidence in the dollar is best illustrated by price fluctuations on the London Gold Market, a secondary market for gold which reopened in 1954. Supply in this market principally came from Russia and South Africa, whilst demand came from central banks and private actors, including speculators and artists (jewellers/ craftsmen). The London price of gold acted as a barometer for the credibility of the dollar-gold peg; the higher the price of gold, the less confidence people had in future convertibility of the dollar. Whilst gold could be freely

<sup>26</sup> Kugler et al, “International Monetary regimes”, 4.

<sup>27</sup> Kugler et al, “International Monetary regimes”, 9.

<sup>28</sup> Kugler et al, “International Monetary regimes”, 8-9; William Phillips, “The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957.” *Economica*, 25, no. 100 (1958): 283-99.

<sup>29</sup> Bordo et al, “The Gold Pool”, 1037-1039.

<sup>30</sup> Kugler et al, “International Monetary regimes”, 8-9.

purchased and sold from the US at the official parity of \$35/ ounce, the shipping parity of gold from New York to London was around \$35.20/ ounce. If the London gold price rose above \$35.20, it became profitable for central banks to purchase in the US and sell in London, posing a serious threat to US gold reserves.<sup>31</sup>

It was not the first time a monetary system faced this problem, and the Bretton Woods ‘gold dollar standard’ was actually quite similar to the bi-metallic standard employed in Britain during the 17<sup>th</sup> and early 18<sup>th</sup> century. When the mint value of gold fell below the market price in the 18<sup>th</sup> century, Sir Isaac Newton, Master of the Mint, took the decision to revalue gold against silver.<sup>32</sup> This quickly drove silver (now undervalued) out of circulation, as private actors exported it abroad in return for a higher sum of gold.<sup>33</sup> Similarly, under Bretton Woods if the London Gold Market continued to value gold higher than the US (shipping) parity, gold would very quickly be driven out of circulation from the US and the international monetary system would lose the backing of its primary reserve asset.

Numerous factors influenced the value of gold/ credibility of the dollar. Whilst the Articles of Agreement allowed member countries to devalue their currencies in cases of a ‘fundamental disequilibrium’, the US itself was of course forbidden from doing this. As mentioned above, US monetary policy was also constrained by the threat of gold outflows, leaving little room to lower interest rates. This imposed a fundamental and permanent constraint on US export markets. The US current account was negative, but the economy actually enjoyed a significant trade surplus. The deficit was driven by capital investments, and the constraint on US export markets did not pose an immediate threat.<sup>34</sup> However, full current account convertibility had taken almost 15 years to achieve, and major economies such as West Germany and the Netherlands had suspended convertibility to devalue their currencies further.<sup>35</sup> This reduced demand for US exports, and markets feared that in the long run the US might have to suspend convertibility and devalue the dollar.

In October 1960 the London price of gold jumped to \$38, signalling a critical lack of confidence in the peg. The price change was driven by anticipation of the election of John F. Kennedy, who, despite ruling out a devaluation of the dollar, had promised an expansionary fiscal policy that would surely lead to inflation. On behalf of the US Treasury, the Bank of England sold gold on the London Market to lower the price, and the Basel group of central banks agreed not to buy gold when prices rose above the shipping parity. The measures worked, and the price level fell below \$35.20.<sup>36</sup> However, the solution was temporary, and the US Treasury required a more permanent resolution to protect its gold reserves.

The solution was a Gold Pool (or ‘The Pool’), created as a selling syndicate in 1961 and then upgraded to a buying syndicate as well in 1962. The Pool was a multilateral agreement between major central banks (US, UK, Switzerland, France, West Germany, Italy, Belgium and the Netherlands), all regular buyers on the London market, who each poured a portion of their gold reserves into one pool. The Pool sold gold when the price rose above the US shipment parity, and then bought gold when the price fell below a lower band of \$35.08.<sup>37</sup> Profits and losses were distributed evenly, according to each members’ quota. Initially the Bank of England

<sup>31</sup> Bordo et al, “The Gold Pool”, 1031-1032.

<sup>32</sup> Newton, I. “Sir Isaac Newton’s Report on the Gold and Silver Coin in 1717.” *The Numismatic Chronicle and Journal of the Numismatic Society*, 11 (1848): 181–185.

<sup>33</sup> Angel Redish, “The Evolution of the Gold Standard in England.” *The Journal of Economic History*, 50, no. 4 (1990): 796.

<sup>34</sup> Meltzer, “US Policy”, 56.

<sup>35</sup> Kugler et al, “International Monetary Regimes”, 5-9.

<sup>36</sup> Bordo et al, “The Gold Pool”, 1031-1033.

<sup>37</sup> Bordo et al, “The Gold Pool”, 1036.

had been reluctant to give up its privileged access to the London market, but the UK authorities soon realised they could not afford to be left out of the syndicate.<sup>38</sup> Initially the Pool proved effective, with another successful intervention in 1961. The price then stabilised around the lower bound figure of \$35.08, with only the Cuban Missile Crisis causing a brief spike in the price in 1962.<sup>39</sup> However, the success of Gold Pool interventions was short lived, and 1964 saw a marked upward (and volatile) trend in the price of gold.

To understand what caused the following spike in the price of gold, it is important to understand the unique relationship established between the dollar and sterling. When the Articles of Agreement were originally signed the USSR withdrew from the Bretton Woods conference, giving the UK the second largest share of IMF quotas (the US and UK held 53% of total quotas).<sup>40</sup> The UK had then been the largest beneficiary of funding during the Marshall Plan,<sup>41</sup> and one of the first major economies to achieve a current account surplus. After a failed attempt to implement current account convertibility, it was also part of the first group of major economies to peg its currency to the dollar.<sup>42</sup> As the UK began to invest abroad, central banks also began using sterling as a secondary reserve currency and the fate of sterling and the dollar became closely tied.<sup>43</sup>

The initial jump in gold price is largely attributed to the election of Harold Wilson's Labour government, and his proposals for expansionary monetary and fiscal policies that would inevitably lead to inflation. The price level persisted upwards as holders of sterling turned to gold.<sup>44</sup> The increase in volatility is easier to explain and was likely driven by market expectations of a dollar devaluation. Speculators realised only a fraction of the currency was convertible into gold, and as this fraction gradually decreased international markets began to doubt the sustainability of the dollar's convertibility.<sup>45</sup> In 1966 the gold price reached the upper bound limit of \$35.20 for consecutive days, despite interventions to lower the price. Eventually, in 1967, the UK was forced to devalue by 14.3%. Gold price volatility persisted, and one month later the Gold Pool collapsed.<sup>46</sup>

The fact that holders of sterling bought gold, and not dollars, was a major indication of the confidence problem. The US also faced high inflation rates and a significant current account deficit, and the increased gold prices only worsened its outflow of reserves. Convertibility was only guaranteed by the monetary authorities of the day, and if Britain had eventually turned to devaluation why wouldn't the US? US authorities publicly committed themselves to a restrictive monetary policy, yet the US monetary base showed no signs of 'tight money' as it continued to grow well beyond the Federal Reserve's gold cover.<sup>47</sup> International markets were beginning to have serious doubts about the dollar's indefinite peg to gold.

Germany was the first major economy to suspend the dollar peg in 1969. Again, the gold price increased, and yet counter-intuitively the US decided to lower interest rates. This was surprising, as any country facing a run on its currency would normally raise interest rates, if it

<sup>38</sup> Gianni Toniolo and Piet Clement, *Central bank cooperation at the Bank for International Settlements, 1930-1973* (Cambridge-New York: Cambridge University Press, 2005), 375.

<sup>39</sup> Bordo et al, "The Gold Pool", 1036-1037.

<sup>40</sup> Kugler et al, "International Monetary Regimes", 5.

<sup>41</sup> Tarnoff, "The Marshall Plan", 8.

<sup>42</sup> Kugler et al, "International Monetary Regimes", 7.

<sup>43</sup> Meltzer, "US Policy", 68-70.

<sup>44</sup> Bordo et al, "The Gold Pool", 1038.

<sup>45</sup> Scott Newton, "The Two Sterling Crises of 1964 and the Decision Not to Devalue." *The Economic History Review*, 62, no. 1 (2009): 93-94; Michael Bordo, Ronald Macdonald and Michael Oliver, "Sterling in Crisis, 1964-1967." *European Review of Economic History*, 13, no. 3 (2009): 437.

<sup>46</sup> Bordo et al, "Sterling in Crisis", 1039-1040.

<sup>47</sup> Meltzer, "US Policy", 58-59.

had any intention of defending its exchange rate. Then in 1971, France and Britain followed suit, only worsening the outflow of US gold (of which Germany and Japan acquired more than half). It was clear the Bretton Woods system was collapsing, and to protect the US's dwindling gold reserves Richard Nixon suspended convertibility of the dollar in 1971, drawing the Bretton Woods system to a close.<sup>48</sup> By 1973 all major currencies had left the peg, the price of gold surged, and the global economy entered into the system of floating exchange rates that we see today.

The Bretton Woods system proved unsustainable, and markets had lost confidence in the convertibility of the dollar. There was also a clear psychological shift that, despite the advantages of integrated markets, fixed exchange rates were no longer necessary for stable economic growth. The confidence problem was inevitable, and the Bretton Woods system was bound to fail from its creation.

## **V. Could Bretton Woods have been better designed?**

At this point it is worth considering whether alternative designs of the fixed exchange rate system might have improved its resilience and prevented failure.

Keynes originally proposed that once surplus economies accumulated adequate reserves they should lend to deficit economies, enforced by a system of penalties.<sup>49</sup> This would have eased the burden of US foreign liabilities, addressing both the liquidity and confidence problem. Another possibility could have been to tie the price of gold to the inflation rate. For four hundred years the purchasing power of gold (in terms of a basket of commodities) was more or less constant, earning it the enduring reputation as a good hedge against inflation. The unprecedented price increases in the 1970s were temporary and driven by speculation, and from 1900 to 1990 the price of both gold and a market basket of US goods increased by a factor of fifteen.<sup>50</sup> Tying gold to the inflation level would have reduced the incentives for currency speculation, and the value of reserve assets could have increased in line with economic growth. Of course, it is hard to imagine how such a system would have fared during the inflationary pressure of the 1970s (driven by the exogenous shock of oil prices). If gold had risen in line with oil prices this would have severely reduced the competitiveness of member states, and surely increased the demand for Chinese and Russian imports.

Of course, such discussions very quickly enter the realm of counterfactual analyses, describing a global economy starkly different from the one we inhabit today. However, assuming such a Bretton Woods system could have endured the inflationary pressures of the 1970s, it is then worth questioning whether capital controls could have been effectively implemented and maintained, and if they are appropriate for the globalized economy we see today. Such controls were necessary to stabilise exchange rates and prevent runs on central banks, but from the very beginning proved hard to enforce. Keynes and White had originally envisaged compulsory controls as a condition for membership, but a last-minute intervention from powerful New York bankers saw the policy heavily watered down to a voluntary condition.<sup>51</sup> In 1963 the Kennedy administration imposed the Interest Equalization Tax, a tax on purchases of foreign securities. Whilst the tax proved effective in reducing new foreign issuances and encouraging the liquidation of outstanding assets, the policy failed to reduce the net outflow of capital from the US due to a rise in other forms of lending to foreigners. It has even been argued the tax promoted internationalization of capital markets, by incentivising potential foreign borrowers to build close

<sup>48</sup> Meltzer, "US Policy", 75-76.

<sup>49</sup> Kugler et al, "International Monetary Regimes", 4.

<sup>50</sup> Charles Kindleberger and Robert Aliber, *Manias, Panics, and Crashes. A History of Financial Crises*, (5th ed, New Jersey: Wiley John Wiley & Sons, 2005) 43.

<sup>51</sup> Ghosh et al, "What's In a Name?", 17.

relationships with US banks and by encouraging greater receptivity in European capital markets.<sup>52</sup> Another prominent example of capital control failure was the UK. After it resuspended its peg in 1947 (after only 6 weeks of current account convertibility) the Bank of England faced a run on its gold reserves. The UK imposed strict capital controls, which lasted until Margaret Thatcher's first year in office in 1979. However, the controls proved ineffective, and the 1950/60s saw a huge increase in the London Eurodollar market, due to a loophole involving the purchase of foreign futures.<sup>53</sup>

We now live in an era of highly integrated international markets. Globalization has fostered unprecedented levels of economic growth, and integration into the global economy has become one of the most effective tools to reduce poverty and increase living standards.<sup>54</sup> Capital mobility is a fundamental element of this system. Even if a modified Bretton Woods had overcome the problems of liquidity, confidence and speculation, it is hard to suggest modern economies would be better off within a system of capital restrictions.

## VI. Summary and concluding remarks

The Bretton Woods system emerged as a 'gold dollar standard', in which the US acted as the world's primary creditor and central banks held dollars *in lieu* of gold. Triffin was the first to highlight the fundamental problem facing the system. As economies around the world grew, so did the demand for liquidity and safe assets. The US monetary base had to expand faster than its gold reserves, creating a dilemma for US policy makers. If the US stopped issuing dollars, the loss of liquidity would lead to payment deficits and global deflation. However, if the US continued to issue dollars and surpass the Federal Reserve's gold cover, central banks and international markets would lose confidence in the currency and stage a run on gold. When US foreign liabilities surpassed gold cover in 1964 no run ensued, and it appeared Triffin was wrong. However, market volatility increased dramatically as speculators began to doubt the indefinite convertibility of the dollar. Central banks desperately tried to stabilise the price, but despite open market interventions the price of gold persisted upwards. It became harder for policy makers to convincingly rule out devaluation of the dollar, and after the withdrawal of three major economies the US was eventually forced to suspend convertibility.

The Bretton Woods system provided a novel solution to the financial turmoil of the interwar era. It facilitated rapid economic recovery in Europe and proved remarkably effective in preventing currency and banking crises, but the success was unsustainable. It is debatable whether alternative forms of the Bretton Woods system might have endured to the modern day, but ultimately the system that emerged in 1944 placed unrealistic expectations on US monetary authorities and was doomed to fail from the very beginning.

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<sup>52</sup> Richard Cooper, "The Interest Equalization Tax: An Experiment in the Separation of Capital Markets." *FinanzArchiv / Public Finance Analysis*, 24, no. 3 (1965): 469-470. <http://www.jstor.org/stable/40909967>.

<sup>53</sup> Ghosh et al, "What's in a name?", 17-18.

<sup>54</sup> David Dollar David, D. "Globalization, Poverty, and Inequality since 1980." *The World Bank Research Observer*, 20, no. 2 (2005): 145-175.

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