

The fall of Bretton Woods:

FX, 50 years afloat

Today's global foreign exchange (FX) regime, whereby market demand for and supply of currencies determines exchange rates, is only 50 years old. After the collapse of the fixed exchange rate system of Bretton Woods, the world's major currencies learned to float. Over time, the FX market grew into the world's largest financial market, and CLS has helped to foster that growth. Through the lens of CLS, this paper examines the past, explores today's FX arrangements and considers the future of the FX market.



The past

The global FX market - the largest financial market in the world - is steeped in rich history (figure 1).¹ As the American astronomer Carl Sagan famously put it, "you have to know the past to understand the present." So let us take a look at how developments over time have led to the FX market we know today and CLS's vital role within it.

How it all began

The use of currency evolved over centuries. Coins were first introduced around 600 BC.² Fast forwarding to the 15th century, Banca Monte dei Paschi di Siena, the world's first bank, was created with the sole purpose of administering currency transactions. This institution was lending money before Columbus discovered America.

The first FX marketplace - where the growing number of banks could freely trade currencies - was established in

Amsterdam in the 17th century, helping to stabilize currency exchange rates³ and paving the way for the model that exists today. The shiny centerpiece at the heart of these developments - and all currency trading - was gold.

The old but gold standard

The "gold standard" became the established regime for fixing exchange rates around the world, wherein most currencies were valued according to a specific weight of gold.4

Though the gold standard allowed world trading to accelerate rapidly over the second half of the 19th century,5 it led to considerable volatility in the FX market. Moreover, the gold standard was inflexible and did not allow countries the discretion to adjust monetary policy in response to periods of extreme economic hardship, such as the Great Depression and the two World Wars.⁶

The "gold standard" became the established regime for fixing exchange rates around the world... "

"



- Chaboud, A. et al. (2023) The Foreign Exchange Market.
- Ancient Egyptian and Greek civilizations traded goods and services for silver and gold coins. The Roman Empire centralized currency minting and began a monopoly on a currency of gold coins. Copper became a popular medium for minted coins in the Middle Ages, granting more people access to lower value coins. Huzefa, H. (2008) The History of the Forex Market, DailyForex.
- The gold standard was pioneered by Great Britain in the 19th century. Large scale production of gold in the US began with the California Gold Rush of 1848. In 1861, the US printed its first paper money, and the Gold Standard Act (1900) made gold the only metal to be exchangeable for paper currency. By that point most currencies around the world were pegged to gold, or 'the gold standard'
- Federico, G., Tena-Junguito, A. (2019) World Trade, 1800-1938: A New Synthesis, Revista De Historia Economica Journal of Iberian and Latin American Economic History, 37(1).
- Cassel, G (2017) The Downfall of the Gold Standard.

Figure 1: The history of FX trading

600 BC

- Early currency trading via bartering
- Introduction of coinage allowed coins to be used as means of trade for goods and services

Early AD

 Roman Empire centralized currency minting and began a monopoly on currency of gold coins

Middle Ages

· Copper coinage increased access to money

World's first bank established in 1472 with sole purpose of administering currency transactions

Early Modern

 First foreign exchange market established in Amsterdam enabled currencies to be freely traded

Act in 1900 Abandoned near end

Gold Standard

of Second World War

in 1840s

· Pioneered by Great Britain US passed Gold Standard

Bretton Woods

- Bretton Woods system set up in 1944
- All currencies pegged to dollar, which in turn was pegged to gold
- Unravelled in 1973

Source: CLS

Out of the (Bretton) Woods

The final stages of the Second World War brought calls to change from the gold standard. Leaders from around the world gathered in what has been described as an "unprecedented cooperative effort for nations that had been setting up barriers between their economies for more than a decade".7

In 1944, the Bretton Woods system was established:8 currencies were pegged to the US dollar,9 which in turn was pegged to gold. During the system's existence, the global FX market used a fixed exchange rate system, and this rigid construction ultimately led to its demise. A plunge in US dollar reserves led some nations to devalue their currencies, which further pressured currency supplies.¹⁰ Struggling with a balance of payments deficit and crippling inflation, the US unpegged the dollar from gold in 1971, and the Bretton Woods system began to unravel.¹¹ The system collapsed by 1973, giving rise to the free-floating currency market that continues today.

"

The [Bretton Woods] system collapsed by 1973, giving rise to the free-floating currency market that continues today.

"

www.federalreservehistory.org/essays/bretton-woods-created

The Bretton Woods system also brought about the founding of two influential institutions: the International Monetary Fund and the World Bank.

There was almost no discussion about the exchange rate regime at the Bretton Woods conference in 1944 because John Maynard Keynes and Harry Dexter White preferred stabilizing exchange rates through fixed but adjustable pegs (which can be readjusted to account for changing market conditions or macroeconomic trends). cpb-us-e1.wpmucdn.com/sites.dartmouth.edu/dist/c/1993/files/2018/08/w23037-1lmsfoe.pdf

¹⁰ The dollar became overvalued, and by the 1960s the outstanding US dollar liabilities exceeded the US gold stock, suggesting that the US could not completely maintain its pledge to convert dollars into gold at the official price. As US dollar reserves continued to plummet, some nations devalued their currencies, putting further pressure on US dollar supplies and leading the US to place restrictions on access. A balance of payments deficit and crippling inflation led the US to eventually remove the dollar from the gold standard in 1971. See Coppola, F. (2019) The Rise and Fall of the Bretton Woods Fixed Exchange Rate System. ¹¹ Bordo M. D. et al (2011) US Intervention during the Bretton Woods Era: 1962–1973.

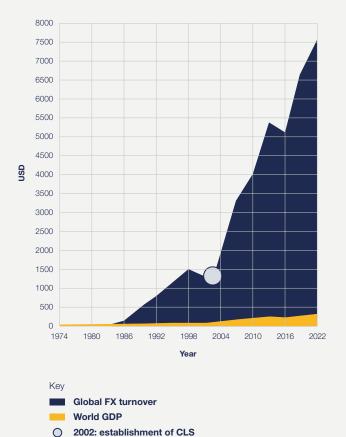
The present

The liberalization of exchange rates for the world's major currencies drew criticism. In fact, many viewed the fluctuations endemic to floating exchange rates as obstacles to international trade and domestic macroeconomic stability. In hindsight, these concerns were unjustified overall. FX rates have successfully floated even through stormy seas, and the global FX market has risen in importance.

Growing in size, FX going XXL

The FX market has grown exponentially since the early 1970s, broadly fueled by four general trends: (i) globalization led to a substantial increase in cross-border trade and investment activities; (ii) financial liberalization increased international capital flows; (iii) technology facilitated new business models like electronic trading platforms and high frequency algorithmic trading; and (iv) lower barriers to entry enabled retail investors to access the FX market.

Figure 2: FX market growth (USD billion per day)



Source: BIS Triennial Survey results; World Development Indicators Database Fifty years ago, the FX market's daily trading volume was below USD100 billion globally.¹² Between 1983 and 2022, FX market turnover surged from USD110 billion to around USD7.5 trillion per day.¹³ Put into perspective, in 1983, the FX throughput was around four times the (daily) global domestic product, while in 2022, FX turnover was more than thirty times larger (figure 2).¹⁴

This massive growth – in both relative and absolute terms – solidified the FX market's status as an essential component of the modern global economy.

The establishment of CLS in 2002 significantly boosted FX market activity. CLS mitigates FX settlement risk, i.e., the risk that one party delivers the currency it sold but does not receive the currency it bought. This risk came into the spotlight one year after Bretton Woods ended, when Herstatt Bank collapsed in 1974, freezing the outgoing legs of FX payments that had already been received. At that time the FX market was only 1% of its size today.¹⁵

Over the years, CLS has become a central cog in the FX market. The settlement risk mitigation CLS delivers has stimulated growth in FX market volumes, which in turn increases the need for CLS's settlement risk mitigation.

Dynamic ecosystem, FX influx

At the center of the FX market, banks facilitate transactions for their clients and trade on their own accounts to manage their exposure. Multinational corporations and other non-financial institutions maneuver in the FX market to manage their import and export financials. Asset managers, hedge funds, pension funds and other financial institutions seek profits from currency movements or hedge their global investment portfolios. Central banks intervene for reasons ranging from monetary and financial stability to foreign reserve management.

Today, there are more players in the FX market than ever before, and their roles have shifted. The share of non-financial institutions has halved over the last twenty years, and with it the relative importance of international trade in the FX market.¹⁶ The share of bank dealers has decreased over the same period, while new players like principal trading firms have joined the fray.¹⁷ CLS membership and participation has grown in sync with the market. For example, the number of CLS settlement members increased from 48 to 74 over the past two decades, and third-party indirect participants shot up from 250 to more than 35,000 over the same period.

¹² DraKoln, N. (2004) Forex for small speculators.

¹³ Frankel, J. et al (1996) The microstructure of foreign exchange markets / chapter: Risk and Turnover in the Foreign Exchange market; BIS Triennial Central Bank Survey – Foreign exchange and derivatives market activity.

¹⁴ Source: World Bank, World Development Indicators database: global GDP in 1983: USD11.84 trillion = ca. USD0.03 billion per day; global GDP in 2022: USD101 trillion = USD0.27 trillion per day.

¹⁵ Shaping FX 02 – FX settlement risk: To PvP or not to PvP.

¹⁶ According to BIS Triennial survey, the share of non-financial customers fell from 20% to 10% over the past two decades.

¹⁷ Chaboud, A. et al (2023) The foreign exchange market.

New currencies, expanding FX

The 193 member states of the United Nations use several different forms of FX arrangements.¹⁸ Sixty-two countries,¹⁹ including the world's largest currency blocs, have floating FX regimes, and 24 still apply hard pegs that involve fixed exchange rates vis-à-vis one currency.²⁰ The remaining countries often apply so-called soft peg regimes between floating and fixed rates, e.g., wherein a currency's exchange rates are maintained within a certain range.²¹

As some countries have a monetary union with other countries, dual regimes with more than one currency in place, or no legal tender, the actual number of currencies in the world is currently 164.²² Two-thirds of those currencies face limitations that hinder their tradability, such as hard pegs (and to some extent also soft pegs), capital controls, other governmental restrictions, global and regional sanctions, political or economic instability and/or a lack of market depth. Today, the remaining third (56 currencies) are actively traded globally.²³

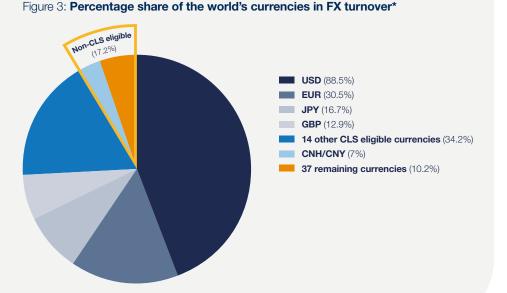
Over the years, the US dollar has been the most traded currency by far, being on one side of 88% of all trades (because every FX trade involves two currencies, the total FX turnover equals 200%). Its unrivaled position can be attributed to its prominent role in offshore markets, international trades and global payments, and also because it is used as a vehicle currency for FX transactions.²⁴

The euro share in FX trades has been stably sitting between 31% and 39% since its inception in 1999, followed by the Japanese yen (17% to 24%) and British pound (12% to 16%).

Collectively, the remaining 52 currencies are on one side of 51% of all FX trades. Fourteen of these, which altogether represent 34% of all FX trades, can be settled in CLS (along with the US dollar, euro, Japanese yen and British pound) and thereby benefit from its settlement risk mitigation.²⁵

Seventeen percent of trades involving currencies with a global footprint cannot currently be settled via CLS (figure 3). With strong industry support, CLS is working on solutions to mitigate settlement risk for these trades,²⁶ and also for transactions in regionally traded currencies, provided there is market interest and no legal impediments or sanctions.

Excluding the introduction of the euro in 1999, the most traded currencies remained largely unchanged over the past five decades. One remarkable development in recent years is the rise of emerging market currencies. Over the past two decades, the share of the Chinese renminbi has grown from 1% to 7%, making it the fifth most traded currency in the world. All globally traded emerging market currencies have a strong international focus, with more than 80% of all such trading activities involving counterparties that reside outside the issuing country.²⁷



66

Over the years, the US dollar has been the most traded currency by far, being on one side of 88% of all trades.

"

Source: BIS Triennial Survey 2022 *Because every FX trade involves two currencies, the total turnover equals 200%

- ¹⁸ IMF (2022) Annual Report on Exchange Arrangements and Exchange Restrictions.
- ¹⁹ Which include the 20 countries of the euro area.
- ²⁰ Which is different from the Bretton Woods era, when nearly all currencies were fixed vis-à-vis each other through their parities to the USD.
- ²¹ Habermeier, K. et al (2009) Revised System for the classification of exchange rate arrangements. IMF working paper.
- ²² See countries-ofthe-world.com
- 23 Drehmann, M., Sushko, V. (2022) The global foreign exchange market in a higher-volatility environment. BIS Quarterly Review, December 2022.
- ²⁴ Maronoti, B. (2022) Revisiting the international role of the US dollar. BIS Quarterly Review, December 2022, Box A.
- ²⁵ CLS settles AUD, CAD, CHF, DKK, EUR, GBP, HKD, HUF, ILS, JPY, KRW, MXN, NOK, NZD, SEK, SGD, USD and ZAR.

²⁶ Adding currencies to CLSSettlement requires ongoing support from the central bank and at times legal changes in the target jurisdiction. In view of these requirements, CLS is focusing efforts to address this issue by enhancing CLSNet, its standardized, automated bilateral payment netting calculation service for over 120 currencies. CLSNet helps to support payment netting systems that reduce payment obligations exposed to settlement risk while improving operational and liquidity efficiencies.
²⁷ Caballero, J. et al (2022) The internationalisation of EME currency trading; BIS Quarterly review December 2022.



The future

Looking back to the future

While some jurisdictions use less flexible exchange rate systems in view of their specific financial and economic circumstances, the benefits of flexible exchange rates are widely recognized across the world.²⁸ For example, flexible exchange rates promote financial sector development,²⁹ facilitate adjustment to external shocks³⁰ and allow monetary policy to manage inflation and achieve domestic price stability.

Over the past several decades, emerging market currencies have trended toward free-floating rates in response to periods of crisis and hardship.³¹ Nations have recognized the benefits fostered by well-functioning flexible exchange rates, which boost market-based liberalized trade and promote global economic growth and prosperity.³²

Shocks and crises, fight or float?

The global FX market is no stranger to shocks and crises, especially over the past 50 years. In fact, we are now said to be living in an age of 'polycrisis', suggesting more volatility is on the horizon.³³ Jurisdictions once favored FX intervention tools to manipulate the exchange rate. Although still used in developing countries, the medium- and long-term impact of these tools have been questioned in recent years, and their use has declined since the 2007–2008 global financial crisis.³⁴

Instead, it is those countries with flexible exchange rates that have arguably been the most stable since the global financial crisis. The use of floating rates continues to engender stability and autonomy to respond to economic hardship.³⁵

22 Dodge, D. (2007) The Importance of Appropriate Exchange Rate Regimes. Speech to the 46th ACI Financial Markets Association World Congress,

³³ World Economic Forum, Global Risks Report, 2023.

²⁸ IMF (2000), Exchange Rate Regimes in an Increasingly Integrated World Economy.

²⁹ Schembri, L. (2019) The merits of a floating exchange rate.

³⁰ E.g., the oil price shock in 2014.

³¹ Ho, C. et al (2003) Living with flexible exchange rates: issues and recent experience in inflation targeting emerging market economies.

Montréal; Carriere-Swallow, Y. et al (2017) How Flexible Exchange Rates Helped Latin America Adjust to Commodity Price Shocks.

³⁴ Chaboud et al (2023)

³⁵ Rose, A. K. (2014) Surprising Similarities: Recent Monetary Regimes of Small Economies. Journal of International Money and Finance 49 (Part A): 5–27.

What will the next 50 years bring?

The international monetary system has remained relatively stable despite recent geopolitical tensions, and the FX market remains on a trajectory of continued growth.³⁶ As settlement risk remains a key focus for the growing market, CLS continues to play a crucial role in mitigating this risk.

As new technologies reshape our daily lives and feed an increasing demand for speed, the FX world is likewise expected to continue to transform.

- There are discussions around shorter settlement cycles and eventually same-day or even instant settlement. The upcoming transition from T+2 to T+1 in the US and Canada for securities³⁷ may possibly spur developments towards more same-day and instant FX trading and settlement.³⁸
- Artificial Intelligence (AI) technology has already found its way into the FX space, and it is believed that up to 90% of trades use AI to improve speed and efficiency.³⁹ As the current public discussion around generative AI suggests, algorithms will play an increasing role going forward.
- The jury is still out on whether and to what extent blockchain could alter the FX space. Most recently, new business models in the decentralized finance (DeFi) space claim to facilitate real-time exchanges in the FX market without the need for intermediaries.⁴⁰
- On the asset side, a recent BIS survey estimates that some two dozen central banks will have digital currencies in circulation by the end of the decade.⁴¹ In particular, the BIS Innovation Hub is experimenting with multicurrency cross-border payment transfers,⁴² which may offer a glimpse of how FX trade and settlement will transform in the coming years.

Since its birth five decades ago, the FX market has continuously adapted and grown into the largest financial market at a global level. In today's fast-paced world, we can only expect that change will continue to be the only constant in FX.

- ³⁶ den Besten, T. et al (2023) Geopolitical fragmentation risks and international currencies. Special feature A, ECB report on the international role of the euro.
- ³⁷ In January 2023, India completed its transition to T+1, and the US and Canada will do the same for most securities trades starting in May 2024. The EU and the UK have not yet decided their approach, and most Asia Pacific financial markets currently remain with the T+2 settlement cycle. Because of time zone differences, European and Asian market players will have much less time to mobilize the required currency for a T+1 securities trade in the US, and may eventually be forced to settle T+0 FX trades same day in Europe and Asia, respectively.
- ³⁸ Bullmann, D. (2023) Atomic Settlement: Counting down to zero, CLS opinion piece.
- ³⁹ How Has Artificial Intelligence (AI) Changed the Forex Market? Fintech News.
- ⁴⁰ Kusnetov (2023), Could DeFi Be the Future of Foreign Exchange Trading?, Nasdaq.
 ⁴¹ Kosse, A, Mattei, I. (2023) Making headway Results of the 2022 BIS survey on central
- bank digital currencies and crypto.
 ⁴² bisih.org

For more information please email info@cls-group.com

Trusted by thousands of counterparties within the global FX ecosystem, CLS makes FX safer, smoother and more cost effective. Trillions of dollars' worth of currency flows through our systems each day. London Hong Kong Tokyo New York New Jersey info@cls-group.com cls-group.com

All views or opinions expressed in this document are CLS's and do not reflect the position of any other organization. The information included herein does not constitute investment or financial advice and should not be relied upon as such. This document is for the exclusive use of the recipient and may not be quoted, forwarded, copied or shared, in whole or in part, without the prior written permission of CLS Group. © 2023. CLS Group. All Rights Reserved. CLS and the CLS logo are registered trademarks of CLS UK Intermediate Holdings Ltd. Rev Q3/1023.

FX Global Code

Using CLS products and

services plays an integral part in helping you comply with the FX Global Code. Find out more

at cls-group.com