Finance in the Global Market Unit 1 The International Context of Finance

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Unit Overview

In Unit 1, by studying the evolution of today's international monetary system, you will examine the major operating principles, or 'rules of the game', of alternative international exchange rate regimes. You will see how the rules of the game for the classical gold standard, the Bretton Woods system, and the Euro system have operated in practice. You will also study the pros and cons of fixed, intermediate and floating exchange rate regimes.

The overall question, which is the main learning objective of this unit, may be expressed as follows:

What is likely to be the future evolution of exchange rate regimes?

Learning outcomes

When you have completed your study of this unit and its readings, you will be able to:

- explain the nature of an exchange rate regime
- describe the exchange rate regime of the Bretton Woods system until 1973
- discuss the difference between 'hard peg', fully 'independent floating' and intermediate regimes
- define the 'bipolar view', and discuss the reasoning supporting it and some arguments against it
- outline the modern history of the euro, of China's exchange rate regime, and of Argentina's exchange rate regime.

Reading for Unit 1

David K Eiteman, Arthur I Stonehill and Michael H Moffett (2021) Chapter 2 'The international monetary system'. *Multinational Business Finance*. 15th Edition. Harlow UK: Pearson Education.

Stanley Fischer (2001) 'Exchange Rate Regimes: Is the Bipolar View Correct?', *Journal of Economic Perspectives*, 15 (2), 3–24.

Piti Disyatat and Phurichai Rungcharoenkitkul (2016) 'Financial globalisation and monetary independence', *BIS Papers No 88*, 213–225.

1.1 Exchange Rate Regimes

As noted in the module introduction, in exploring problems of corporate strategies within the international financial system, you need to understand the main features of the international financial system. In Unit 1, you study the international financial system. It is the structure within which foreign exchange rates are determined and international trade and capital flows are accommodated.

The international financial system has evolved historically through the policies of governments and their interaction with the market forces generated by banks, firms and individuals. Governments' efforts to set the framework for the international financial structure have required international cooperation of three types:

- *Multilateral organisation*: Since it was founded in 1945 the International Monetary Fund, which is an organisation of member states, has been the main institution through which governments have influenced how exchange rates are determined, although its significance and role have changed since 1973.
- Specific cooperation: Governments of leading economies have also attempted to negotiate major shifts between themselves. The most famous example is the 1985 Plaza Accord between the US, Japan, West Germany, the UK and France, which agreed to engineer a devaluation of the US dollar against the German and Japanese currencies. In the twenty-first century, the clearest example is the effort of the US to persuade China to change the trading system of its currency.
- Regional organisation: Governments have also negotiated on a regional basis between themselves to achieve changes affecting the whole international financial system. The outstanding successful example of such a change has been the adoption of the euro in 1999 by eleven European nations.

Those examples of nations' different types of projects to reshape the international financial system are characterised by different types of exchange rate regimes:

- Pegged exchange rates (fixed but adjustable rates) underpinned the system supervised by the International Monetary Fund until 1973.
- *Managed floating exchange rates* between the major currencies were the subject of the Plaza Accord.
- Adopting the euro created a *currency union*, uniting economies with a single shared currency creating an irrevocably fixed exchange rate with each country's old, and vanished, currency.

In this unit we shall focus on exchange rates as the central feature of international financial systems; within each system different exchange rate regimes are prevalent. We have mentioned three regimes – pegged rates,

managed floating rates, currency union – but soon you will see that there is a wider spectrum of regimes.

To examine the role of exchange rate regimes in international finance, we usually assume that an individual country has to choose its exchange rate regime and then look at the costs and benefits of the alternatives. And, in reality, individual countries do face such choices from time to time. Since the IMF-supervised formal system of pegged exchange rates ended in 1973 countries have adopted numerous different types of exchange rate regimes.

Moreover, from time to time, individual countries face difficult choices about whether to change their regime. For example, a country with pegged exchange rates might find the regime too costly and face the difficult issue of whether to switch to floating exchange rates. Or a country that says it has pure (independent) floating rates might, when faced with exchange rate volatility, decide to switch to a regime of managed floating rates.

Let us take a look at the range of exchange rate regimes that different countries operate, and see which countries use which regime. Although the IMF no longer regulates a universal regime of pegged exchange rates, it does have continuing responsibility for overseeing the world's financial system and annually records the exchange rate regimes of its member states. Box 1.1 shows its list of countries' exchange rate regimes effective on 30 April 2016 (it is published on the IMF website).

Box 1.1 Classification of Exchange Rate Arrangements and Monetary Policy Frameworks

This classification system is based on members' actual, *de facto*, arrangements as identified by IMF staff, which may differ from their officially announced arrangements. The scheme ranks exchange rate arrangements on the basis of their degree of flexibility and the existence of formal or informal commitments to exchange rate paths. It distinguishes among different forms of exchange rate regimes, in addition to arrangements with no separate legal tender, to help assess the implications of the choice of exchange rate arrangement for the degree of monetary policy independence. The system presents members' exchange rate regimes against alternative monetary policy frameworks with the intention of using both criteria as a way of providing greater transparency in the classification scheme and to illustrate that different exchange rate regimes can be consistent with similar monetary policy frameworks. The following explains the categories.

Exchange Rate Regimes

Exchange Arrangements with No Separate Legal Tender

The currency of another country circulates as the sole legal tender (formal dollarization), or the member belongs to a monetary or currency union in which the same legal tender |is shared by the members of the union. Adopting such regimes implies the complete surrender of the monetary authorities' independent control over domestic monetary policy.

Currency Board Arrangements

A monetary regime based on an explicit legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate, combined with

restrictions on the issuing authority to ensure the fulfilment of its legal obligation. This implies that domestic currency will be issued only against foreign exchange and that it remains fully backed by foreign assets, eliminating traditional central bank functions, such as monetary control and lender-of-last-resort, and leaving little scope for discretionary monetary policy. Some flexibility may still be afforded, depending on how strict the banking rules of the currency board arrangement are.

Conventional Peg

With a conventional peg the country authorities' formally ($de\ jure$) peg its currency at a fixed rate to another currency or basket of currencies, where the basket is formed, for example, from the currencies of major trading or financial partners and weights reflect the geographic distribution of trade, services, or capital flows. The fixed parity is maintained through direct intervention (i.e. via sale or purchase of foreign exchange in the market) or indirect intervention (e.g. via exchange rate related use of interest rate policy, imposition of foreign exchange regulations, exercise of moral suasion that constrains foreign exchange activity, or intervention by other public institutions). There is no commitment to irrevocably keep the parity, but the formal arrangement must be confirmed empirically: the exchange rate may fluctuate within narrow margins of less than $\pm 1\%$ around a central rate or the maximum and minimum value of the spot market exchange rate must remain within a narrow margin of 2% for at least six months.

Stabilised arrangement

In a stabilised arrangement the spot market exchange rate of a currency has to remain within a margin of 2% for six months or more (with the exception of a specified number of outliers or step adjustments) and is not floating. The required margin of stability can be met either with respect to a single currency or a basket of currencies, where the anchor currency or the basket is ascertained or confirmed using statistical techniques.

Crawling Pegs

The currency is adjusted periodically in small amounts at a fixed rate or in response to changes in selective quantitative indicators, such as past inflation differentials vis-à-vis major trading partners, differentials between the inflation target and expected inflation in major trading partners, and so forth. The rate of crawl can be set to generate inflation-adjusted changes in the exchange rate (backward looking), or set at a pre-announced fixed rate and/or below the projected inflation differentials (forward looking). Maintaining a crawling peg imposes constraints on monetary policy in a manner similar to a fixed peg system.

Crawl-like arrangements

The exchange rate must remain within a narrow margin of 2% relative to a statistically identified trend for six months or more (with the exception of a specified number of outliers) and the exchange rate arrangement cannot be considered as floating. Normally, a minimum rate of change greater than allowed under a stabilised (peg-like) arrangement is required. However, an arrangement will be considered crawl-like with an annualised rate of change of at least 1%, provided that the exchange rate appreciates or depreciates in a sufficiently monotonic and continuous manner.

Pegged Exchange Rates within Horizontal Bands

The value of the currency is maintained within certain margins of fluctuation of at least ± 1 per cent around a fixed central rate or the margin between the maximum and minimum value of the exchange rate exceeds 2 per cent. It also includes arrangements of countries in the exchange rate mechanism (ERM) of the European Monetary System

(EMS) that was replaced with the ERM II on January 1, 1999. There is a limited degree of monetary policy discretion, depending on the bandwidth.

Other managed arrangements

This category is a residual and is used when the exchange rate arrangement does not meet the criteria for any of the other categories. Arrangements characterised by frequent shifts in policies may fall into this category.

Floating

The exchange rate is market-determined, with any official foreign exchange market intervention aimed at moderating the rate of change and preventing undue fluctuations in the exchange rate, rather than at establishing a level for it. Foreign exchange market intervention may be either direct or indirect, and such intervention serves to moderate the rate of change and prevent undue fluctuations in the exchange rate, but policies targeting a specific level of the exchange rate are incompatible with floating. Indicators for managing the rate are broadly judgemental (e.g. balance of payments position, international reserves, parallel market developments). Floating arrangements may exhibit more or less exchange rate volatility, depending on the size of the shocks affecting the economy.

Free floating

Free floating occurs if intervention is only exceptional and aims to address disorderly market conditions and if the authorities have provided information or data confirming that intervention has been limited to at most three instances in the previous six months, each lasting no more than three business days. If the information or data required are not available to the IMF staff, the arrangement will be classified as floating.

Monetary Policy Framework

The exchange rate regimes are presented alongside monetary policy frameworks in order to present the role of the exchange rate in broad economic policy and help identify potential sources of inconsistency in the monetary—exchange rate policy mix.

Exchange Rate Anchor

The monetary authority stands ready to buy/sell foreign exchange at given quoted rates to maintain the exchange rate at its pre-announced level or range; the exchange rate serves as the nominal anchor or intermediate target of monetary policy. This type of regime covers exchange rate regimes with no separate legal tender; currency board arrangements; fixed pegs with and without bands; and crawling pegs with and without bands.

Monetary Aggregate Anchor

The monetary authority uses its instruments to achieve a target growth rate for a monetary aggregate, such as reserve money, M1, or M2, and the targeted aggregate becomes the nominal anchor or intermediate target of monetary policy.

Inflation Targeting Framework

This involves the public announcement of medium-term numerical targets for inflation with an institutional commitment by the monetary authority to achieve these targets. Additional key features include increased communication with the public and the markets about the plans and objectives of monetary policymakers and increased accountability of the central bank for attaining its inflation objectives. Monetary policy decisions are guided by the deviation of forecasts of future inflation from the announced

target, with the inflation forecast acting (implicitly or explicitly) as the intermediate target of monetary policy.

Other monetary framework

The country has no explicitly stated nominal anchor but rather monitors various indicators in conducting monetary policy, or there is no relevant information available for the country.

Based on 'Annual Report on Exchange Arrangements and Exchange Restrictions' (2016)

Table 1.1 De Facto Exchange Rate Arrangements and Anchors of Monetary Policy as of April 30, 2016¹

	Monetary Policy Framework							
Exchange rate arrangement (Number of	Exchange rate anchor						Inflation targeting framework	Other ¹
countries)	U.S. dollar (39)		Euro (25)	Composite (9)	Other (48)	target (24)	(48)	(48)
Exchange arrangement with no separate legal tender (14)	Ecuador El Salvador Marshall Islands Micronesia	Palau Panama Timor-Leste Zimbabwe	Kosovo Montenegro San Marino		Kiribati Nauru ² (04/16) Tuvalu			
Currency board arrangement (11)	Djibouti Hong Kong ECCU Antigua and Barbuda Dominica Grenada	St. Kitts and Nevis St. Lucia ² St. Vincent and the Grenadines ²	Bosnia and Herzegovina Bulgaria		Brunei Darussalam			
Conventional peg (44)	Aruba The Bahamas Bahrain Barbados Belize Curaçao and Sint Maarten Eritrea Iraq Jordan Oman Qatar Saudi Arabia	Turkmenistan United Arab Emirates Venezuela	Cabo Verde Comoros Denmark³ São Tomé and Príncipe WAEMU Benin Burkina Faso Côte d'Ivoire Guinea Bissau Mali Niger Senegal Togo CEMAC Cameroon Central African Republic Chad Rep. of Congo Equatorial Guinea Gabon	Fiji Kuwait Libya (01/15) Morocco ⁴	Bhutan Lesotho Namibia Nepal Swaziland			Solomon Islands ⁵ Samoa
Stabilised arrangement (18)	Guyana Lebanon	Maldives Trinidad and Tobago	FYR Macedonia	Singapore Vietnam ⁶		Bangladesh ⁶ Bolivia ⁶ Burundi ⁶ Democratic Rep. of the Congo ⁶ Nigeria ⁶ (03/15) Suriname ⁶ Yemen ⁶	Czech Rep. ⁷	Costa Rica ^{6,8} Lao P.D.R. ⁶ (01/15) Sudan ⁶ (01/15)

Crawl-like Arrangements (10)		Croatia	Iran ⁶	Ethiopia ⁶ Uzbekistan ⁶	Dominican Republic ⁶	Jamaica ^{6,8} Mauritania ^{6,9} (09/14) Papua New Guinea ⁶ Sri Lanka ^{6,8,9} (10/14) Tunisia ^{5,8}
Pegged exchange rate within horizontal bands (1)						Tonga
Other managed arrangement (20)	Cambodia (03/15) Liberia		Syria	Algeria Belarus (01/15) China ⁹ (12/14) The Gambia (05/15) Guinea (02/15) Myanmar Rwanda (03/15) Tajikistan (03/15)		Angola (06/15) Azerbaijan (12/15) Egypt (01/15) Haiti (06/15) Kyrgyz Rep. Malaysia Pakistan Paraguay South Sudan (12/15) Vanatu
Floating (40)				Afghanistan Madagascar Malawi Mozambique Seychelles Sierra Leone Tanzania	Albania Armenia ⁹ (11/14) Brazil Colombia Georgia Ghana Guatemala Hungary Iceland India Indonesia Israel Kazakhstan (12/15) Korea Moldova New Zealand Paraguay Peru Philippines Romania Serbia ⁶ South Africa Thailand Turkey Uganda Uruguay ⁹	Argentina ⁸ (12/15) Kenya ⁸ Mauritius Mongolia ⁸ Switzerland (01/15) Ukraine Zambia
Free Floating (31)					Australia Canada Chile Japan Mexico ¹⁰ Norway Poland Russia (07/15) Sweden	Somalia ¹¹ United States EMU Austria Belgium Cyprus Estonia Finland France Germany

			United	Greece
			Kingdom	Ireland
				Italy
				Latvia
				Lithuania
				(01/15)
				Luxembourg
				Malta
				Netherlands
				Slovak Rep.
				Slovenia
				Spain

Notes: If the member country's de facto exchange rate arrangement has been reclassified during the reporting period, the date of change is indicated in parentheses.

CEMAC = Central African Economic and Monetary Community; ECCU = Eastern Caribbean Currency Union; EMU = European Economic and Monetary Union;

WAEMU = West African Economic and Monetary Union.

- 1/ Includes countries that have no explicitly stated nominal anchor, but rather monitor various indicators in conducting monetary policy.
- 2/ Nauru became a member of the IMF on April 12, 2016
- 3/ The member participates in the ERM II.
- 4/ Within the framework of an exchange rate fixed to a currency composite, the Bank Al-Maghrib adopted a monetary policy framework in 2006 based on various inflation indicators with the overnight interest rate as its operational target to pursue its main objective of price stability.
- 5/ The country maintains a de facto exchange rate anchor to a composite.
- 6/ The country maintains a de facto exchange rate anchor to the U.S. dollar.
- 7/ The country maintains a de facto exchange rate anchor to the euro.
- 8/ The central bank has taken preliminary steps toward inflation targeting.
- 9/ The exchange rate arrangement or monetary policy framework was reclassified retroactively, overriding a previously published classification.
- 10/ The exchange rate arrangement was reclassified twice during this reporting period, reverting back to the classification in the previous year's report.
- 11/ Currently the Central Bank of Somalia does not have a monetary policy.

IMF (2016)

Banks, firms or individuals making financial decisions have to make judgements about exchange rate risks and the profit (or loss) they can obtain from exchange rate changes. And in order to do that, they have to understand countries' exchange rate regimes and possible changes to them. For example, until 1997 South Korea's regime was effectively a pegged exchange rate, tying its currency to the US dollar; investors in South Korean bank deposits should have taken that into account in assessing their returns and should also have taken account of the possibility that the pegged exchange rate regime would change (as it did when South Korea was forced to abandon that peg by the 1997 Asian crisis).

Review Ouestion 1.1

 Having abandoned its pegged exchange rate regime as a result of the 1997 crisis, what exchange rate regime did South Korea have subsequently? It is shown as Korea in the Table of Box 1.1. At this point in the unit, it is useful for you to study some of the main twentieth century developments in the international financial system. They are the roots from which the present international financial system has grown.

Reading 1.1

Please read now the first sections of Chapter 2, pages 49–64 (up to the section on 'Emerging markets and regime choices'), of *Multinational Business Finance* by Eiteman, Stonehill and Moffett.

Eiteman et a/(2021) Chapter 2 'The international monetary system' in Multinational Business Finance.

While reading those pages, please make sure your notes cover the following:

- the features of the exchange rate regime associated with the International Monetary Fund from 1945 to 1973
- the nature of Eurocurrencies.

1.2 Fixed and Floating Exchange Rates

In this unit we focus on the world's exchange rate regimes and their evolution. As you saw from Box 1.1, the IMF classifies them into eight categories. In order to analyse exchange rate regimes, economists simplify the alternatives to two:

- fixed exchange rate regimes
- floating exchange rate regimes

and they compare their advantages and disadvantages.

1.2.1 Can governments set their country's exchange rate?

When ordinary people consider their country's economic situation, they often think the government (or central bank) should change the exchange rate. Export-oriented manufacturers and their employees might argue that the government should devalue the currency, reducing its price in terms of foreign currencies. Others might favour higher exchange rates to keep down import costs. However, in the world's large developed economies, the exchange rate is not controlled by the government or central bank ('the authorities'). How is the exchange rate determined?

In all cases where a currency may be traded, the foreign exchange price of a country's exchange rate – the nominal exchange rate – is determined by the foreign exchange markets. The foreign exchange markets are driven by 'buy' and 'sell' orders emanating from banks, firms and individuals pursuing trade and, particularly, by investment decisions.

In an economy with a fixed rate (such as the 'other conventional fixed peg category' in Box 1.1) the authorities buy and sell foreign and domestic currency in order to prevent the exchange rate moving far from its target value or peg. Thus, they add policy-driven demand and supply to the 'buy'

and 'sell' orders emanating from banks, firms and individuals pursuing trade and, particularly, investment decisions. In such countries, the authorities can intervene directly to change the peg to a new fixed rate and buy and sell currency to support it. In discussing the merits of fixed rates we shall assume that the authorities' intervention always succeeds in determining the exchange rate, but in fact it has to interact with private buy and sell orders, and speculative flows might outweigh the authorities' effect.

In an economy with an independent (pure) floating rate, the authorities do not add their own buy or sell orders to influence the exchange rate. Instead the exchange rate moves wholly in response to 'buy' and 'sell' orders emanating from banks, firms and individuals pursuing trade and investment decisions. The government cannot change the exchange rate directly unless it abandons the regime of independent floating. Therefore the citizens of the 35 countries listed in Box 1.1 as independently floating cannot expect their authorities to alter the exchange rate directly. That includes the major economies of the US, Japan, the UK and the Eurozone (since the Eurozone as a body is not a member state of the IMF, it is not included in the 35).

1.2.2 Interaction of exchange rate and monetary policy

Whether we are considering fixed or floating exchange rates, governments and central banks can adopt policies that have *indirect effects* on exchange rates. For example, higher interest rates relative to other countries' can be expected to cause upward pressure on the exchange rate by attracting capital inflows.

The fact that governments and central banks can influence the exchange rate indirectly through monetary policy on the interest rate illustrates one of the most important characteristics of exchange rate policy:

exchange rates and monetary policy are interdependent.

Study Note 1.1

In your reading of Section 1.1, you might have already noticed a clue indicating that the exchange rate and monetary policy are interdependent. The table in Box 1.1 lists countries according to their exchange rate regime. But it also subdivides them on another dimension, their monetary policy regime. In case you did not notice that, please look at the table again.

1.2.3 The impossible trinity

Because the exchange rate and interest rates are interdependent, countries that attempt to have fixed exchange rates have to make some difficult choices.

You have already read about a famous set of choices in the section of the Eiteman *et al* titled 'The impossible trinity' (Eiteman *et al*, 2021: 59–61). Let

us look again at the idea of 'the impossible trinity' explained there, for it is at the centre of a debate over the way that the international financial system is evolving.

'The impossible trinity' starts from the idea that countries would like to have three things:

- 1. a stable exchange rate (analysed by assuming that means a fixed peg)
- 2. full integration into the global financial market (analysed by assuming that means absence of controls on capital inflows and outflows)
- 3. monetary independence (analysed by assuming this means the ability to set interest rates at a level that is best for the country's domestic economy and is generally different from other countries' interest rates).

In order to analyse 'the impossible trinity' and the alternatives available to a country we usually define each of the three goals more precisely as three policy regimes:

- 1' a fixed peg exchange rate regime
- 2' perfect capital mobility (absence of controls and costs on inflows and outflows of capital)
- 3' monetary policy target defined in terms of domestic economic indicators alone (such as interest rates adjusted to attain inflation targets).

Why is the trinity impossible? Why can a country not have all three? We can explain with the help of a characteristic example.

Imagine a country that fixes its exchange rate against the US dollar. In order to maintain its fixed level it must have its interest rate at a level, relative to others, that ensures that net capital flows are sustainable. If, then, US interest rates were to be reduced by the Federal Reserve but no other key variables changed, this country would have to lower its own interest rate and therefore, instead of having an independent monetary policy, would have to follow US monetary policy. If it did not follow the US interest rates down, there would be an increased net capital inflow (remember that one element of the trinity is free capital flows) and the inflow would put upward pressure on the exchange rate. In order to absorb that pressure and maintain the fixed exchange rate, the country's central bank would have to buy US dollars and, in the process, increase the stock of the domestic currency, putting downward pressure on domestic real interest rates and fuelling inflation.

Thus, the impossible trinity means that the government can have any two of the three things listed, but not all three. In our example, the country could abandon its full integration into the global financial market by imposing capital controls. In that case, it could have both monetary independence (its own interest rate policy) and a stable exchange rate. Or it could abandon its fixed exchange rate, allowing it to float so that an independent interest rate

policy which, with full integration into the global market, would change capital inflows and thereby cause an unhindered change in exchange rate.

Review Question 1.2

What is the third pair of policies the country could choose?

1.3 Exchange Rate Regimes – a Bipolar Future?

In Section 1.1, you saw that countries' exchange rate regimes can be classified into eight different types. In this section we want you to examine a view that has been debated by economists since the 1997 Asian crisis. The debate concerns the view that:

• There is a tendency for countries to move to one of two extreme regimes: either a fixed rate with a 'hard peg' (such as a currency board) or a fully flexible 'independent float'.

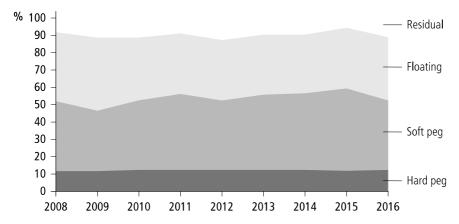
1.3.1 The bipolar view

That 'bipolar view' is based on the idea that in the modern world of highly developed global capital markets, countries find it difficult to maintain intermediate regimes and, over time, move to one of the two extremes. That means that regimes such as those described in Box 1.1 as 'Conventional Peg', which predominated during the Bretton Woods system until 1973, have been steadily diminishing in importance in the Nineties and in the first part of the current century. A regularity should be noted, namely that financial crises are most threatening for soft pegs. A strong decline was noticed after the 1998 Asian crisis and again after the 2007–2008 Great Financial crisis.

Proponents of the bipolar view do more than describe such changes, for to enable us to understand existing and future trends we have to explain them. One explanation for the decrease in intermediate regimes is based upon 'the impossible trinity' notion.

In reading the articles we assign for this section, we want you to think about the reasons for the decrease in intermediate regimes. Why do countries find it difficult (or undesirable) to maintain intermediate regimes? How do those difficulties relate to 'the impossible trinity'?

Figure 1.1 Exchange Rate Arrangements, 2008–16
Percentage of IMF members as of April 30, 2016



Source: Finance and Development (2008); data derived from IMF Staff Reports and IMF Annual Report on Exchange Arrangements and Restrictions database

The first article assigned for this section is by Stanley Fischer, an eminent academic economist and economic policy maker.

Reading 1.2

Now, please read Fischer's article, 'Exchange Rate Regimes: Is the Bipolar View Correct?'.

Fischer (2001) 'Exchange rate regimes: Is the bipolar view correct?' *Journal of Economic Perspectives.*

After you have read Fischer's article, please try to write a few sentences on the two questions we posed before your reading:

- Why do countries find it difficult (or undesirable) to maintain intermediate regimes?
- How do those difficulties relate to 'the impossible trinity'?

1.3.2 Do countries have other alternatives?

The bipolar view, which is a description and analysis of the choices countries make, implies that the two extreme types of regime are the only alternatives available to a country. Are they?

In this section, we would like you to consider an analysis of 'the impossible trinity' that considers a wider range of alternatives. In 'Financial globalisation and monetary independence', Disyatat and Rungcharoenkitkul discusses the classic Mundell-Fleming trilemma, which states that countries can simultaneously attain no more than two objectives out of the possible combination among capital mobility, a fixed exchange rate, and an independent ability to set interest rates. We would like you to read Disyatat and Rungcharoenkitkul's article and form your own view on whether central banks do indeed retain the power to determine local financial conditions even in a financially globalised world.

Reading 1.3

Please read 'Financial globalisation and monetary independence' by Disyatat and Rungcharoenkitkul. Take notes on the precise meaning of 'monetary autonomy' 'monetary dependence', 'financial contagion' and 'fundamentals-based comovements'.

Now that you have finished reading about the impossible trinity, please pause and reflect on the following question:

If you were a central banker would you endorse an increase in bond premium in the country as 'the beginning of the end' of monetary policy independence? Would your claim be different if the country was a developing economy? What other fundamentals of the economy would you look at? Disyatat & Rungcharoenkitkul (2016) 'Financial globalisation and monetary independence'. Expanding the boundaries of monetary policy in Asia and the Pacific.

1.4 Recent Examples of Hard Pegs and Intermediate Regimes

You saw in Figure 1.1 above that since 1991 there has been a move away from 'intermediate' regimes to the two extreme alternatives. But it is important not to oversimplify, as can be seen if we examine some major individual examples.

In this section we would like you to consider three examples:

- 1. One of the greatest innovations in modern times, the creation of the euro, is an outstanding example of creating a hard peg, for it linked eleven initial countries' currencies at fixed exchange rates and abolished them as individual currencies.
 - If we think that the individual members of the eurozone could not have sustained an intermediate regime because speculative capital flows would have undermined each peg or target, the fact that the euro could not be undermined by speculating against (non-existing) individual currencies supports the reasoning behind the bipolar view. Some take the view that if Italy, for example, had attempted to maintain a conventional peg outside the euro instead of joining the eurozone, speculative flows would have made the regime unsustainable.
- 2. On the other hand, at least one important country has found a form of hard peg unsustainable and moved to an intermediate regime. In 1991 Argentina moved from an intermediate regime to a hard peg in the form of a currency board. But in January 2002, enmeshed in a crisis with some 'impossible trinity' characteristics, Argentina abandoned it. After initially allowing a fully free float, the country moved to a regime that, in effect, amounted to a conventional peg.
 - In Box 1.1, Argentina is classified as having a floating regime since December 2015 as the central bank has taken preliminary steps toward inflation targeting.

3. Many countries continue to operate intermediate regimes and, as can be seen from Box 1.1, China, one of the world's most important economies, is an outstanding example. During the early years of the twenty-first century, many have argued that China should significantly revalue its currency (renminbi, sometimes known as the yuan). China's policy makers have argued that any move towards a floating exchange rate could not occur until the institutional framework of a deep, liquid and sophisticated foreign exchange market (and, we should add, related financial markets) has been created and matured.

Box 1.2 Czech Koruna and Swiss Franc – how to and not to unpeg

In April 2017 the Czech Republic abandoned its policy of pegging its value to the euro and the Czech Koruna (CZK) strengthened, falling under CZK27 to the euro — up by 1.55 per cent against the euro — for the first time since that lower level was imposed in November 2013.

Inflation in the Czech Republic rose to a 2.5 per cent annual rate in February and the central bank said the peg was no longer necessary 'from the perspective of fulfilment of the CNB's primary objective of price stability'.

While the central bank did not adjust the supply of money via interest rates, it did signal unpegging the currency was the 'first step' in tightening monetary policy.

The relative lack of market chaos led to favourable comparisons with the unpegging of the Swiss franc. The Swiss central bank unpegged its currency in January 2015 without warning, sending the value of the franc soaring by around 19 per cent.

On January 15th, 2015 when the Swiss National Bank (SNB) suddenly announced that it would no longer hold the Swiss franc at a fixed exchange rate with the euro, there was panic: the euro went from 1.2 Swiss francs to just 0.85 francs in a day.

SNB introduced the exchange-rate peg in 2011, while financial markets around the world were in turmoil. Investors consider the Swiss franc as a 'safe haven' asset, along with American government bonds: buy them and you know your money will not be at risk. Investors like the franc because they think the Swiss government is a safe pair of hands: it runs a balanced budget, for instance. But as investors flocked to the franc, they dramatically pushed up its value. An expensive franc hurts Switzerland because the economy is heavily reliant on selling things abroad: exports of goods and services are worth over 70% of GDP.

To bring down the franc's value, the SNB created new francs and used them to buy euros. Increasing the supply of francs relative to euros on foreign-exchange markets caused the franc's value to fall (thereby ensuring a euro was worth 1.2 francs).

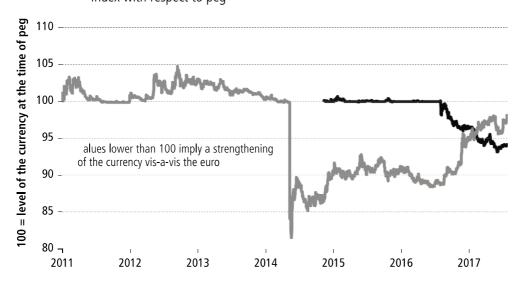
The higher volatility of the CHF after unpegging may be explained by three main forces:

- In November 2014 there was a referendum which, had it passed, would have made
 it difficult for the SNB to increase its reserves;
- Many (rightly) expected the European Central Bank to introduce 'quantitative easing'. This entailed the creation of money to buy the government debt of eurozone countries. That would have pushed down the value of the euro, which might have required the SNB to print lots more francs to maintain the cap;
- Also, during 2014 the euro depreciated against other major currencies. As a result, the franc (being pegged to the euro) had depreciated too: in 2014 it lost about 12%

of its value against the dollar and 10% against the rupee (though it appreciated against both currencies following the SNB's decision). A cheaper franc boosted exports to America and India, which together make up about 20% of Swiss exports.

After unpegging the stock market fell because Swiss companies were perceived as less advantaged in selling their wares to European customers and investors fled, thereby partially supporting themselves a recovery of the euro.

Figure 1.2 CZK and CHF float free Index with respect to peg



Now we would like you to read Eiteman *et al's* discussion of those three examples and consider whether they increase or decrease confidence in the bipolar view.

Reading 1.4

Please read now the remainder of Chapter 2, from the section 'Emerging markets and regime choices', pp. 64–75, of *Multinational Business Finance* by Eiteman *et al* (2021).

Make sure your notes cover the question raised above over your degree of confidence in the bipolar view.

Eiteman et al (2021) Chapter 2 'The International Monetary System' in Multinational Business Finance.

1.5 A New Bretton Woods System?

In Section 1.1, you studied the outlines of the Bretton Woods international financial system that existed between 1945 and 1973. Although in this unit we have focused on exchange rate regimes, it is important to note that they do not exist in isolation. To understand the Bretton Woods system, you have to understand two elements associated with the exchange rate regime:

 The pattern of exchange rates and countries' ability to sustain them is linked to the pattern of financing between countries. How were countries' authorities able to borrow foreign exchange reserves or avoid the need to do so? The Bretton Woods system enabled individual countries to borrow temporarily from the IMF. Over the long term, it required the US to borrow by issuing dollars that other countries could accumulate as reserves because the system treated the US dollar as the main reserve currency.

• Countries with pegged exchange rates might choose to maintain undervalued currencies or, in other words, exchange rates that boost their net exports. And it has been argued that was an important aspect of the growth of European economies and Japan after 1945.

It has been commonly accepted that the system ended in 1973. But recently economists have argued that subsequent exchange rate regimes are, in effect, a new version of the same system.

The argument that there is a new Bretton Woods system is based on the fact that developing Asian economies are following the same path as Europe and Japan under the original Bretton Woods system. They have pegged exchange rates at levels that are too low in the sense that they generate continuing large surpluses of net exports. And they accumulate US dollars by financing the United States' deficits.

1.5.1 **After 1973** (Optional)

In this section we give you the option of reading two papers on the hypothesis that the world has developed a new Bretton Woods system since 1973. One, by Michael Dooley, David Folkerts-Landau and Peter Garber, sets out the argument that there is and will be a revived Bretton Woods System. The other, by Barry Eichengreen, is critical of their arguments.

Please remember that these are optional readings. You should read them if you are interested in studying the issues in depth and if you have enough time to read them within the period allotted for this unit.

Optional Reading 1.1 and 1.2

Michael Dooley, David Folkerts-Landau and Peter Garber (2003) 'An Essay on the Revived Bretton Woods System', NBER Working Paper no. 9971. This paper is available from: http://www.nber.org/papers/w9971

Barry Eichengreen (2004) 'Global Imbalances and the Lessons of Bretton Woods', NBER Working Paper No. 10497. Available from: http://www.nber.org/papers/w10497

If you have studied these optional readings, please make a note of your reasons for accepting or rejecting the arguments of Dooley, Folkerts-Landau and Garber.

1.6 Conclusion

In this unit you have studied the character and evolution of exchange rate regimes. Why is that useful for understanding finance in the global market? In particular, why is it useful for banks, firms and individuals with international financial assets and liabilities?

There are two principal reasons:

- It is important for decision makers to understand the international financial system, and exchange rate regimes are at its heart.
- Decision-makers have to make judgements on the future levels and volatility of exchange rates. They have two components: the probability of changes in exchange rates within the existing regime, and the probability of a change in the exchange rate regime.

Now that you have finished the unit, you should understand and be able to write on the issues cited as learning outcomes on the unit introduction page:

- the nature of an exchange rate regime
- the exchange rate regime of the Bretton Woods system until 1973
- the difference between 'hard peg', fully 'independently floating', and intermediate regimes
- the meaning of the 'bipolar view', the reasoning supporting it and some arguments against it
- the outline modern history of the euro, of China's exchange rate regime, and of Argentina's exchange rate regime.

And you should be able to give an answer to the question we posed at the beginning of the unit:

• What is likely to be the future evolution of the world's exchange rate regimes?

Review Question 1.3

Please pause here and write a few paragraphs in answer to that question. There is no single right answer. Your answer will depend on the assumptions you make implicitly or explicitly.

References

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