CHAPTER 3. ANALYSIS OF CURRENCY POLICY AND ITS INFLUENCE ON NATIONAL COMPETITIVENESS

3.1. The essence and classification of the exchange rate regimes

The exchange rate plays a crucial role in the system of national settlements. In Ukraine, the exchange rate is formed on the interbank market. The Central bank can influence the demand and supply of foreign currency through interventions.

According to the definition from the Corporate Finance Institute, an exchange rate is a amount at which one currency can be exchanged for another between countries or economic zones[1]. This rate is important to define trade and capital dynamics of the flow and the values of currencies to each other. This rate influences trade conditions and movement of the capital between the countries-trading partners [2].

Each country chooses its own exchange rate system according to its decisions and strategic financial goals. There are four main regimes: fixed, flexible (freely floated), managed float and pegged. However, these regimes can be modified and form new derived types such as dollarization, monetary union regime, and others.

A *fixed regime* maintains the exchange rate stable or with minor fluctuations in narrow boundaries. The *freely floated* exchange rate is formed by the influence of supply and demand on the market without any interventions from authorities or regulators. This regime might have significant fluctuations at any point in time. The *managed float* exchange rate is also defined by the market forces, but with the influence of the regulators to smooth the movements. Pegged exchange rate consists in “pegging” the value of the currency to other foreign currency or to a unit such as gold. Each regime comes with its own set of conditions and implications for a country's monetary policy, economic stability, and integration with the global economy. All comparisons are depicted in Table 3.1.

Table 3.1. Comparative table of pros and cons of regimes of the exchange rate

Exchange rate regime	Advantages	Disadvantages
Fixed	-the constant basis for investment, trade, planning; -restraining devaluation of the currency and inflation; -less risk of price fluctuations -lack of monetary policy discipline.	-hard to define whether the fixed exchange rate is sustainable; -the risk of the significant appreciation of the exchange rate, which also causes the decrease of competitiveness of national goods on foreign markets; -large expenditure of the reserves.
Free floated	-effective allocation of financial resources; -representation of all external and internal shocks; -balancing of demand and supply in the market.	-distortions of resources allocation -difficulties in planning and forecasting for businesses; -overshooting of exchange rate; -abuse of the domestic monetary policy.
Managed float	-protection of investors against sharp fluctuations; -provide a predictable and stable business environment; -protects the economy from big fluctuations.	-manipulation from the government due to lack of transparency; -conflict of interest between exchange rate policy and monetary policy.
Pegged	-mitigation of the impact of domestic price changes; -contributes to the stabilization of export-import prices; -the devaluation of the currency to a big shock.	-the looseness of the monetary independence by the central bank; -the negative impact of the country to which the national currency was pegged; -targets for speculations.

Sources: compiled by authors based on the [3]

The choice of an exchange rate regime is a critical decision for any country, reflecting a complex interplay of economic, financial, and institutional factors. This choice fundamentally hinges on the trade-off between the stability provided by fixed regimes and the flexibility afforded by floating regimes. The choice between stability and flexibility is not static. As a country's economic, financial, and institutional landscape evolves, so might its optimal exchange rate regime. For instance, an emerging market economy may initially adopt a fixed regime to establish credibility and control inflation but may shift to a more flexible regime as its financial markets mature and its institutional capacity strengthens.

At the same time nowadays there are more detailed classifications of the exchange rate regimes. The IMF plays an important role in the evaluation of the exchange rate regimes and provides its classifications. This role is part of its broader mandate to oversee the international monetary and financial system and ensure its stability. The classifications and consultations also help member countries in making informed decisions about their exchange rate policies in the context of their broader economic strategies. The IMF publications define the detailed classification of the exchange rate regimes (Table 3.2). Based on its assessments, the IMF provides policy advice to countries on their exchange rate regimes. It may recommend changes or adjustments to support economic stability, reduce vulnerability to external shocks, or achieve other macroeconomic objectives.

Table 3.2. Classification of the exchange rate regimes according to IMF publications

Exchange Rate Regimes	Characteristic
Exchange Arrangements with No Separate Legal Tender	There is usage of foreign currency as the separate legal tender (it can be dollarization), also country can be a member of monetary union. Country loses independent control in monetary policy
Currency Board Arrangements	Commitment to exchange national currency to foreign one with a fixed exchange rate. National currency is backed by foreign assets with limited possibility of usage the monetary policy.
Other Conventional Fixed Peg Arrangements	Central bank is pegging national currency to foreign or the basket of currencies. Exchange rate can change in the amount less than ±1 percent above or below a central rate. Central bank maintains fixed rate via direct or undirect interventions. Direct interventions include sale or purchase of currency on the market. Indirect interventions consist of strict interest rate policy, foreign exchange regulations, interventions of other institutions etc. At the same time flexibility of central bank policy is wider if to compare to the exchange rate regime with no separate tender.
Pegged Exchange Rates within Horizontal Bands	Fluctuations of exchange rate is at least ±1 percent around a fixed exchange rate.
Crawling Pegs	The exchange rate is regulated by small amounts at the fixed rate. Monetary policy is limited as in case of fixed peg system
Exchange Rates within Crawling Bands	The exchange rate is controlled in certain change of at least ±1 percent.

	Continuation of Table 3.2.
Exchange Rate Regimes	**Characteristic**
Managed Floating with No Predetermined Path for the Exchange Rate	The central bank maintains the exchange rate without specific path or target. Indicators to limiting the rate can be different: balance of payment, international reserves. Direct or indirect interventions can be used
Independently Floating	The exchange rate is defined and influenced by market fluctuations

Source: developed by authors based on [4]

Carmen M. Reinhart and Keneth S. Rogoff have made a detailed classification of the exchange rate regimes:

- Without separate legal tender or currency union
- Pre announced peg
- Pre announced horizontal range (+/-2%)
- Actual peg
- Pre announced crawling peg;
- Moving band (+/-1%)
- Pre announced crawling band (+/-2%)
- Actual crawling peg
- Actual crawling band (+/-2%)
- Pre announced crawling band that is larger or equal to +/-2%
- Actual crawling band (+/-5%)
- Moving band (+/-2%)
- Actual moving band +/-5%/ Managed floating
- Freely floating
- Freely falling
- Dual market when no data on parallel markets are available [5].

This classification is the most detailed and structured and is widely used in the literature.

David Burton and Martin G. Oilman described the examples of the exchange rate regimes [6]. In the case of *peg to a single currency* country can link its national currency to the foreign one- quite often US dollar – and do not change it often. Around a half of developing countries used this exchange rate regime.

Peg with the currency basket composites by the currencies of the countries-trading partners, which makes the exchange rate more stable. Currency changes can be influenced by trade of capital flows.

Limited flexibility includes changing the value of currency with several margins of the peg.

If the *exchange rate is adjusted to indicator,* it includes linking it to changes of different indicators, such as real effective exchange rate.

Managed floating is more flexible than using of band. The central bank maintains the rate, and it can impact it. It is influenced by the amount of international reserves, exchange market changes, real effective exchange rate.

Independent floating includes market- based changes of the exchange rate. The amount of countries, which have the floating rate is increasing last decades [6].

The exchange rate regimes are maintained together with central bank policy framework. According to *exchange rate anchor* regime the exchange rate performs as the nominal anchor. This system involves exchange rate with no separate legal tender, fixed pegs, and also crawling pegs.

The Monetary Aggregate Anchor includes usage of instruments of monetary policy *to* achieve a growth rate for aggregates M1 or M2 and this aggregate becomes an anchor for the monetary policy

In the case of *Inflation Targeting Framework* there are central bank announcements of inflation targets and policy to achieve the target.

Fund-Supported Programs include usage of monetary and exchange rate instruments [4].

According to so called macroeconomic trilemma it can be achieved two of the following: fixed exchange rate, free movement of capital and independent policy of the central bank. Casiraghi, Habermeier, and Harjes (2022) noted that in the free float the nominal anchor as inflation target is needed, usage of peg allows exchange rate to be a nominal anchor [7]. Managed floating, they indicated, is influenced actively via interventions. Authors specified that between late 1990s and Financial Crisis of

2007-2008 it was popular the bipolar opinion of usage free floats or hard pegs. But the last decade changed the opinion about the intermediate regimes, it was discovered that there are the benefits of floating and fixed rates combined, limiting the changes of exchange rate. Casiraghi, Habermeier, and Harjes indicated that choosing the fixed exchange rate demands the fiscal policy to implement countercyclical measures as far as monetary policy cannot fully stabilize macroeconomic conditions in the fixed rate regime. At the same time, they noted that diversification of export makes the country less vulnerable to shocks and it makes less necessarily to use the flexible exchange rate. In the case of trade integration there is increased possibility of peg or common currency. It is interesting that according to their investigation the less flexible the markets of labour, the stronger possibility of flexible exchange rates. Also, authors revealed that high dollarization influences the adoption of flexible exchange rates. To decrease the dollarization, it is needed a policy of low inflation and regulatory policies try to decline the usage of foreign currency. They noted, that countries with big resources base can suffer from the "Dutch disease", in the case of growth of commodity prices on the global market there is appreciation of the real exchange rate, which negatively affects other export industries and diversification of the economy [7].

In general, there are different researches regarding the exchange rate regimes. Scientists reveal the benefits of fixed and floating exchange rates. Bleaney and Tian (2020) highlighted that fixed exchange rate helps to decrease trading costs, they are simple to operate and can be good choice for small open economies. They revealed that floating exchange rate has higher trading costs, it requires nominal anchor such as inflation target and can be a shock absorber.

David Burton and Martin G. Oilman has noted that both the fixed and floating exchange rates have their advantages in different conditions. Since 1970s the countries were moving to the greater flexibility of the exchange rate. Currency pegs were used in 85% of countries in 1975, and only 66% in 1990s. Their great usage of exchange rate regimes also influenced the diversification of schemes. Many of them preferred "managed" floating. Other popular mechanism of floating regimes was independent floats, used by Japan and the USA, when the exchange rate was caused by market fluctuations, and was changed only by small extent by central bank interventions. According to the opinion of David Burton and Martin G. Oilman, pegged exchange rate can be good tool of exchange rate regimes in the case, when it is important to decrease the inflation. In the case when international reserves are exhausted, there arises the necessity to use the floating exchange rate [6].

In 2017 Ethan Ilzetzki, Carmen M. Reinhart, Kenneth S. Rogoff highlightened that around 80% of all countries at that moment used less flexible exchange rate. They investigated the growth in adoption of intermediate regimes, for example, it has increased the number of managed floating regimes especially among the larger emerging markets [5]. It is more flexible exchange rate regime and does not assign an anchor currency.

In 2017 Ethan Ilzetzki, Carmen M. Reinhart, Kenneth S. Rogoff also noted that 60 to 70 % of the researched countries had dollar as the anchor, and US dollar remained its positions of reserve currency in the world [5].

Rupa Duttagupta, Gilda Fernandez and Cem Karacadag researched that countries with fixed exchange rates are vulnerable to currency and banking crises. Flexible exchange rates protect better from external shocks and provide more independent monetary policy [9].

In the case of fixed exchange rate and higher inflation in the country, in comparison to its trading partners, the real exchange rate becomes overvalued, which causes the current account deficit. And adoption of the more flexible exchange rate, as free float or crawling peg may be an option. Authors indicate that for transition to floating exchange rate several factors are needed: liquid foreign exchange market, practice of central bank interventions, alternative anchor instead of fixed exchange rate, monitoring of exposure of private and public entities to the exchange rate risk [9].

Rupa Duttagupta, Gilda Fernandez, and Cem Karacadag noted that interventions of the central bank of Australia and Sweden can be good examples as giving the information in advance. The central bank of United Kingdom reveals the information about interventions in a monthly press release, the European Central Bank also discloses it in the monthly bulletin, the US Federal Reserve System give the information at the same time, when interventions happen [9]. Significant element of central bank policy is control of monetary liquidity or supply. When country moves to the more flexible exchange rate regime, function of managing money supply is transferred to such market instruments, as open market operations, repurchase agreements. While moving to floating exchange rate countries concentrate on inflation targeting.

Changing of exchange rate regimes can be different. If the country has strong macroeconomic policy, it can change the regime faster, which helps to control interventions and protect international reserves.

Graduate change of exchange rates regime can be used in the case of lack of foreign exchange market or ability to evaluate the exchange rate risk. In the case of rapid change such a country can face the exchange rate volatility [9].

The International Monetary Fund plays it particular role in the exchange rate regimes. It ensures that countries-members cooperate with it and promotes a stable system of exchange rates [6].

Countries-members of the International Monetary Fund should notify it about the choice of the exchange rate regime. Exchange rates are discussed on the IMF Executive Board meeting and in the World Economic Outlook.

Currency interventions are an essential tool to affect the fluctuation of the exchange market. There are several types of currency regulation regimes. Each of them has its advantages and disadvantages. When choosing one of the currency regimes, the country must consider the specifics of the internal financial market, the country's development, economic growth, etc. During crisis events such as war, the optimal solution was to fix the exchange rate.

Foreign exchange intervention is one of the key instruments by means of which the Central bank provides its monetary policy to stabilize the exchange rate, strengthen the national currency, and support the economy during crisis events. The main source of interventions is the central bank international reserves. Simultaneously, the size of interventions depends not only on the available reserves but also on the degree of economic shock, the stage of the country's development, and others.

The key purpose of currency interventions is achieving price stability in accordance with the goals of the Central Bank of Ukraine. Based on this, it is necessary to form three main tasks for interventions.

1. At the expense of interventions, it is possible to smooth out the volatility of the exchange rate at a certain level. Sharp and significant exchange rate turbulence occurs during crisis periods. In the case of active panic of the population, the negative consequences of the shock are intensified. It is during such a period that the central bank acts as an active participant in the interbank market and helps to avoid significant exchange rate turbulence by interventions. After the stabilization of the economy in the post-shock period, the involvement of the central bank decreased.
2. Another task is the accumulation of international reserves. It is important for the central bank to maintain the volume of reserves at the generally accepted adequacy criteria, which determine that the volume of reserves should be sufficient to cover three months of future imports of goods and services.
3. The interventions of the central bank should be aimed at maintaining the transmission mechanism, in the event of a decrease in the effectiveness of the interest rate as the main instrument of monetary policy.

Thus, the currency intervention strategy should correspond with the goals of inflation targeting, the current regime of the exchange rate (floating or fixed). Moreover, during the absence of a significant shock and gradual stable development of the economy, the central bank minimizes its influence on exchange rate and guides the improvement of the currency market. The reverse situation persists during the crisis. Then the central bank becomes an active participant in the interbank market, adjusting significant fluctuations through interventions.

During currency interventions, the central bank is guided by the principles of appropriate transparency. This means that information about the criteria for the participation of market subjects, and the results of the implementation of interventions on the market are open and publicly available. However, sensitive parameters and the main motives, and tactics for interventions are not public for the sake of the effectiveness of exchange rate monetary policy.