# Currency Risk Management under Floating Rates

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**Abstract:** As for the research into this subject, we find, therefore, that one of the most important indicators that quantify the international competitiveness is the exchange rate, together with other fundamental macroeconomic variables such as the size of the potential GDP, the equilibrium real exchange rate, gives a certain insight into the functioning of the fundamental macroeconomic mechanisms and their regulation. Commercial and financial operations imply relationships between partners from different currency countries or areas that involve conversion operations, of replacement of a currency to another. Exchange rate fluctuations of one currency create currency risk, to the extent that it is used to carry out international transactions. These operations are subjected to currency risk as exchange rates change frequently from one period to another and, on the other hand, speculations in the forex market influence the exchange rate by the interventions of those who perform them.

**Keywords:** commercial operations; exchange rates; currency risk

Exchange rate effects on international commercial exchanges can be mitigated by protectionist intervention of public authorities on its level. Thus, currency undervaluation leads to higher prices of all imports.

This kind of protection enjoyed by all goods differs from classical tariff measures and non-tariff barriers which are mostly selective. Exchange rate manipulation allows the simultaneous achievement of a protection against imports and an export promotion. The negative effects that arise from exchange rate modification can be mitigated by public authorities through some economic measures aimed at the following:

• economic balance of the balance of external payments;

• improvement of the political and economic image externally;

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• entry into regional and international economic bodies etc.

The measures listed, complemented with those used at the microeconomic level (through contractual or extra contractual methods), may limit the gap between real exchange rate and the economic one and reverse any negative effects.

The analysis of all aspects of the genesis, evolution, development, control and operation in conditions of risk is permanent (Camelia, 2011). Investigations must be deepened, but also correlated with financial results, efficiency and experience of economic operators.

Involvement in a transaction is based on assessments regarding the exchange rate of the currency in which payment is to be achieved or, where appropriate, collection. Therefore, this type of approach is subject to proper start preliminary stages of the transaction. Anticipations, even when using sophisticated methods, are uncertain and, therefore, their use in decision substantiation to participate or not to a transaction involves a certain risk.

The existence of a risk requires knowing ways to reduce risk exposure. Generally, reducing the risk in operations involving choices between currencies is the result of a good choice of the currency in which the transaction is performed in commercial operations, the exporter's interest is to choose that currency of the contract which provides sufficient guarantees of stability or appreciation, and the importer also has the interest to choose the currency (in which payment will be done) showing guarantee of stability and for which there are signs that will depreciate.

Everyone option *is based* on a preliminary study on the evolution of exchange rates (spot and forward), and the factors that can change the course of a currency (the trade balance situation, inflation, interest rate policy etc.).

Currency risk management in the conditions offered by flexible exchange rates implies minimizing losses due to changes in exchange rate[1].

The exporter may avoid exposure to currency exchange, using the simplest non-coverage technique - expressing selling price of a product/service in a foreign currency or choosing another technique in the same category balancing of revenues in currency with the expenditure in the same foreign currency (Mugur, 2010).

The effects of currency risk can be prevented or mitigated by applying some contractual or extra -contractual measures. When negotiating the contract, the

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[1] http://www.ectap.ro/articole/228.pdf.

parties analyze the currency legislation of countries of origin, foreign exchange market developments and foreseeable impact of currency exchange rate of the contract.

Exchange rate fluctuations threaten the activity of companies performing external trade activities, but can be easily avoided by transferring risks in the currency market and in the market of derived products, in the first case, the one of currency markets, banks perform operations in national currency to the detriment of foreign currency or currencies are traded outside the national currency area, in terms of derived products market, it has developed both at the stock and extra-stock level.

Covering the currency risk through operations on the currency market or derivatives market aims both the structure of currency cash that the company has and conduct from foreign exchange point of view of operations with foreign countries. Thus, we are considering the spot coverage by spot transactions and forward cover through forward transactions (*for-ward, futures,* options).

In times of currency tension, as a consequence of the influence of a variety of factors, between exchange rates recorded simultaneously of the same currency in different centers, important differences may occur, which gives the possibility of development of arbitrage operations. Currency arbitrage operations are operations specific to currency market.

Currency arbitration is performed by banks, stock exchanges and currency exchange offices, but among all these, the predominant role comes to the banks that have also a regulatory role in the development of financial activities.

Spot transactions consist in principle in buying a currency in one market a rate and simultaneous selling it on another market, to another rate, exchange differences being the bank's profit. The dollar has a central place in every currency market because this currency serves as the pivot of all transactions, followed closely by the sole European currency.

Numerous currencies play today a marginal role in financing international trade and they are not listed on all international markets. These are the subject of transactions on the national market and some international markets.

Contract currency rate variation compared to the reference currency is reflected by a coefficient (K) which depends on the exchange rate between the two foreign currencies from the moment of payment (CviJ) and by the rate from the date of contract conclusion (CVo).

$$K = \frac{CV_1 - CV_0}{CV_0} \qquad K = \frac{CV_1}{CV_0} - 1 \tag{rel.1.1}$$

Sum of payment from the international commercial contract at maturity of (S1) is determined starting from the value foreseen at the date of conclusion of the contract (So), to which the scaling factor of exchange rate fluctuations is applied, so:

$$S_1 = S_0 + (S_0.K) \quad S_1 = S_0(1 + k) \tag{rel.1.2}$$

Fluctuation above a certain limit (usually specified in percentage in the contract, +/- x%) obliges the debtor to recalculate the value of the contract. If the payment currency suffers from a depreciation compared to currency payment will be made proportionately in a higher amount; if it has been appreciated against the benchmark currency it pays a lower amount.

Thus, even if the currency maintains a relatively stable report against the currency of the contract or other currencies there are frequent cases when compared to another group of currencies, the rate changes in one direction or another, at the same time practice showed that it was difficult to choose "a benchmark currency" against which partners to show the same interest. In order to overcome the difficulties presented and to spread the risk, internationally, a higher degree of usage had a currency clause based on a basket of currencies (simple or weighted basket).

*Simple currency basket clause* requires that the currency of the contract is not related to a single currency, but by a group of currencies (currency basket). Reporting to several currencies compensates contradictory evolutions of the currencies within the basket and reflects a more real trend of the exchange rate evolution.

Fluctuation factor of the payment currency rate compared to the currencies of the basket (K) depends on the payment currency rates compared to the currencies in the basket from the due date (Ci1, Ci2, Ci3, Ci"), by payment currency rates compared to the currencies from basket from the date of contract conclusion (CO1, Co2, Co3, Con) and by the number of currencies in the basket (n).

$$K = \frac{1}{n}\left[\frac{c_1^1}{c_0^1} + \frac{c_1^2}{c_0^2} + \frac{c_1^3}{c_0^3} + \cdots + \frac{c_1^n}{c_0^n}\right] - 1 \tag{rel.13}$$

In the case of this clause the weights attached to currencies in the basket is equal, but there is also the possibility when for to each currency in the basket to be able to assign different weights proportionally to different considered criteria.

The use of *weighted currency basket clause* allows a closer correlation of needs of receipts and payments. This clause considers granting for each currency in the basket a certain weight.

Fluctuation factor of the payment currency rate compared to the currencies in the basket can be determined according to the share of the currencies in the basket (pi, P2,..., $p_n$).

$$K = \left[ p1x \frac{c_1^1}{c_0^1} + p2x \frac{c_1^2}{c_0^2} + p3x \frac{c_1^3}{c_0^3} + \cdots + pn \frac{c_1^n}{c_0^n} \right] - 1 \qquad \textit{(rel.14.)}$$

*The clause of Special Drawing Rights,* as a composite monetary unit has been imposed internationally also as a reference tool in certain transactions. This involves reporting of currency of payment from international commercial contract to DST and recalculation of contractual rights and obligations depending on the evolution of exchange rate from the maturity of the contract compared to the exchange rate from the conclusion of the contract. Fast and secure access to the DST exchange rate published daily by the IMF led to its use (Carmen, 2013).

*The price review clause* is included in the international commercial contracts to mitigate the effects resulting from changes in prices since the date of concluding the contract and until cashing the value of contracted goods.

*Choose the currency of contract*, implicitly the currency that is to be collected or in which the payment will be made plays a major role for the development, under optimal conditions, of relationships with foreign countries in the last decade, there has been a polarization of commercial and financial transactions to a continuing smaller number of coins called *major currencies[1]*.

Thus it is obvious the structure of currencies used in international financial flows, but also the modification of the structure of the shares assigned to currencies that make up the DST composite currency. The importance of selecting the currency of contract arises from the fact that the role of importer is disadvantaged by the payment in a currency that appreciates, and the exporter one, by cashing a currency in a process of depreciation. The position of importer will always involve a weaker

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[1] http://www.econlib.

payment currency and the exporter one- a stronger cashing currency. But as expected, the commercial partners will be placed on a reverse position, appropriate to the circumstances they are in - importer or exporter.

*The inclusion in the price of a precautionary margin* is another method practiced on the international market for many exporters. By resorting to this method, it is envisaged price evolution, inflation and exchange rate fluctuations in their interdependence.

The higher the precautionary margin will be, the higher the predictable risks are and the farther the moment of receipt. Using this technique of hedging currency risk is limited by two factors, by international price (level of the price of the international market for a product offered under similar payment conditions) and the internal production price (the difference arising between the domestic price at which the exported product is realized and the price charged on the international market).

The inclusion of precautionary margin in the price must meet two optimal conditions: product price to remain competitive and the precautionary margin to be as high as possible. Both importing and exporting companies may limit the currency risk by *compensating payments and receipts in a determined currency*, risk appearing only for the balance of operations performed in the same currency or for a period that cannot be synchronized between receipts and payments (Eugen, 2009).

Using another method, namely the one *of anticipations and delays in payments and receipts*, envisages that in the international commercial contracts, delivery deadlines are established for certain periods (months, quarters), while the exchange rate of the payment or cashing currency may fluctuate. For exporters, this technique requires that they postpone the cashing of the money when the currency of the contract is appreciated or to expedite the cashing where the currency of the contract is in the process of depreciation.

At their turn, importers request to defer the payment when the currency contract is depreciating and they hasten to pay when the currency contract tends to appreciate.

Often it is, however, difficult to increase or reduce the volume of exports/imports depending on the exchange rate evolution, but, given the flexibility of this method, the system of anticipations and delays is commonly used by firms.

*Currency hedging* is the strategy through which the exposure to exchange rate fluctuations is minimized, thereby removing the uncertainty of currency transactions and setting out the stability of revenues / profits (Minea, 2013).

A firm that decides to undertake *hedging* for the exposure that it has at risk, aims to minimize the uncertainty and not to maximize profits from currency speculation. A *hedging* position would not produce benefits from favorable exchange rate movements, but instead, will not expose the company to potential loss generated by an unfavorable exchange rate movement. *Hedging* for currency risk coverage is aimed at countering the adverse effects of currency exchange rate changes of payment currency.

The operation involves taking a position contrary to that which the operator holds in a previous transaction. Thus, an exporter that will receive an amount in foreign currency as payment of his deliveries at a certain time, will achieve a sale on schedule of that amount with the same maturity in the forex market in reverse, an importer that will make payment over a certain period will buy the amount needed in foreign currency through forward transactions in the forex market, with the due date of payment in this way, each of the two operators (exporter and importer) make sure that on the payment date, will receive or will pay a an amount in currency whose size is known from the moment of closing operation in the forex market and is no longer dependent on the market exchange rate change (Onofrei, 2014).

In legal terms, we can include certain suspense clauses by which to delay execution of the contract up to fulfilling certain requirements agreed by both parties. However, we may include a clause on retroactive abolition of the contract and putting the parties in the previous situation. We believe that, in order to know and to master properly surveillance techniques for currency risk it is required to keep a permanent contact of dealers with the international market, with the latest both theoretical and practical methods and tools used.

International insurance companies can take over the currency risk of the importer, if the risk is generated by the lack of financial liquidity of the borrower at maturity as a result of his currency depreciation.

On the grounds of manifesting the financial crisis, we believe that the call to the methods of measurement and risk management become a *sine qua non* in substantiating financial decisions all the more necessary for economic operators to

which the exchange rate as a result of import / export operations conducted has a much broader impact.

## Conclusions

Romania's economy has experienced in the last twenty years, a *comprehensive transformation process* in comparison with what we know as way to approach and practice in the communist period.

Some of these changes were natural, determined by the very desire and need to transition from a command economy, in which the State was not only the one which set the game rules, but also the one who held the role of main actor, including before the monetary authority towards a free market economy, open, against which the main element is the free private initiative, which manifests itself on a background in which the state should be as less present, its role being only to establish a legal framework. Generally it is accepted that, in a free market economy with a free exchange rate (floating), the national currency is an "efficient" indicator of purchasing power of that currency.

As we switched from a fixed exchange rate to a floating exchange rate, free created on the market, the exchange rate of the leu has become an indicator reflecting the actual purchasing power of the national currency.

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