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METHODS OF REDUCING EXCHANGE RATE RISK BY ENTERPRISES

Summary. The article discusses methods of reducing exchange rate risk in the business activity of enterprises used currently and during the last twenty years. Advantages and disadvantages of individual derivative instruments are described. Particular attention is paid to so-called currency options, some of which between 2007 and 2009 turned out to be unfavourable for entrepreneurs.

They led many enterprises to bankruptcy or caused substantial financial losses. Due to unfavourable currency options the whole Polish economy incurred losses. It is estimated that the losses might have reached 160 billion PLN. Banks operating on the Polish market, whose mother companies are seated abroad, are predominantly blamed for that situation. Those banks accuse also Polish entrepreneurs, who did not understand fully the sense of those options but wrote them exposing themselves to real substantial losses. The development of the currency option market was also negatively affected by the late implementation of the MiFID directive.

Keywords: derivative instruments, currency options, foreign exchange hedging, MiFID

SPOSOBY ZMNIEJSZENIA RYZYKA KURSOWEGO STOSOWANE W PRZEDSIĘBIORSTWACH

Streszczenie. W artykule omówiono stosowane obecnie i na przestrzeni ostatnich dwudziestu lat sposoby zmniejszenia ryzyka kursowego walut w działalności gospodarczej przedsiębiorstw. Wskazano na zalety i wady poszczególnych instrumentów pochodnych. Szczególnie dużo uwagi poświęcono tzw. opcjom walutowym, z których niektóre w latach 2007-2009 okazały się niekorzystne dla przedsiębiorców.

Doprowadziły one wiele przedsiębiorstw do upadku lub spowodowały wśród nich wielkie straty finansowe. Z powodu niekorzystnych opcji walutowych straty poniosła cała polska gospodarka. Szacuje się, że mogły one wynieść nawet 160 mld zł. Jako głównego winnego w tym działaniu upatruje się banki działające na rynku polskim,

których spółki matki są za granicami Polski. Oskarżenia jednak kierowane są również przez te banki pod adresem przedsiębiorców polskich, którzy nie rozumiejąc w pełni sensu tych opcji wystawiali je, narażając się na realne wielkie straty. Negatywny wpływ na rozwój rynku opcji walutowych miało też spóźnione wdrożenie zasad MiFID-u.

Słowa kluczowe: instrumenty pochodne, opcje walutowe, zabezpieczenie ryzyka kursowego, MiFID

1. Introduction

Risk is a word accompanying every human activity, especially when taking different kinds of decisions. In particular, entrepreneurs carrying on business activity bear risk. The larger the scope of undertaken activity the greater the risk.

Different definitions of risk can be found in subject literature. They depend on the type of activity they refer to. In general, risk can be defined as a factor affecting the change of the result obtained in relation to the result expected. This relation can be best determined by the following formula:

$$R = S * P \quad (1)$$

where:

R – size of risk expressed as profit or loss resulting from activity undertaken,

S – size of possible loss or profit in the field of activity undertaken,

P – probability of favourable or unfavourable condition.

Inserting specific, conventionally accepted values of factors S and P into the formula (1) we get approximate assessment of profits or losses that we may expect when carrying out the task undertaken.

The risk of an entrepreneur carrying on business activity, which is the subject of these considerations, is multiple. For an entrepreneur engaged in foreign trade exchange the risk of fluctuations in the foreign exchange rate of the currency in which the settlement is carried out is very important. This mainly concerns trade exchange with countries using different currencies.

It is worth highlighting here the benefits of using a single currency, e.g. EURO or USD in commercial trading. Burdensome conversions and complicated safeguards would not be then necessary.

It is probably not possible to introduce a single global currency, although such attempts are made, for example, *COIN* – currency used on the Internet.

Polish enterprises conduct trade exchange at a large scale with almost every country worldwide. The exchange is predominantly settled in EURO or USD, however, other currencies are very often used, e.g. British pound (GBP), Swiss franc (CHF), Swedish krone (SEK), Danish krone (DKK) and others. To assess the profitability of an investment in particular when settlement is made after some time it is necessary to secure against fluctuations in the foreign exchange rate of those currencies.

Polish trade exchange with other countries has been growing particularly intensively after Poland's accession to the European Union in 2004. Trade exchange, and especially export of goods and services is considered as a factor in economic development of the country. The pace of Poland's export and import between 2002 and 2015 is shown in fig. 1.

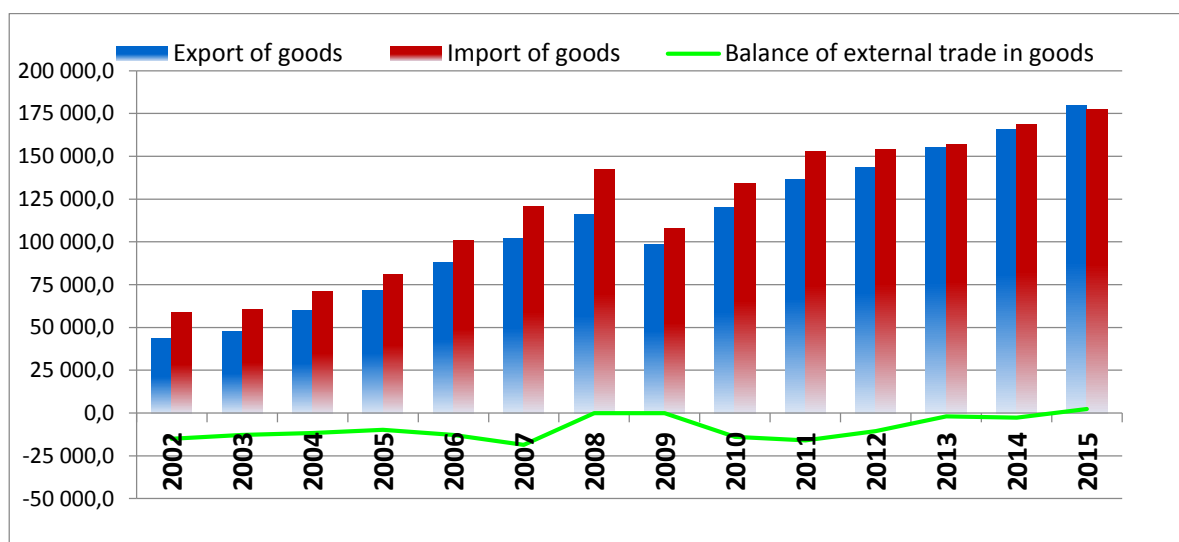


Fig. 1. Value of trade in goods in Poland 2002-2015 [million PLN]

Rys. 1. Wartość obrotów towarowych w Polsce w latach 2002-2015 [mln zł]

Source: Own study based on the Central Statistical Office (GUS) data.

Figure 2 shows changes in exchange rate of EUR and USD against Polish zloty (PLN) 2002-2015.

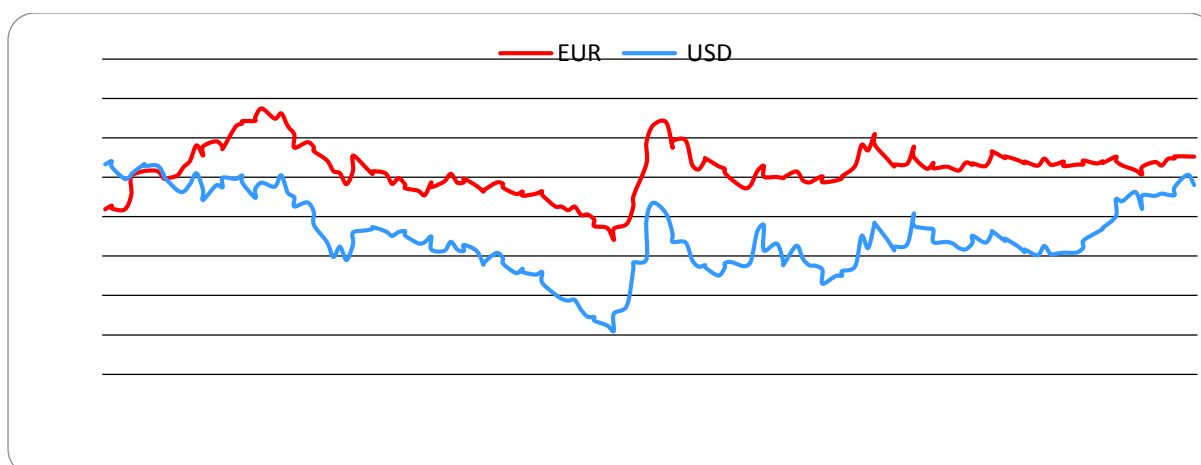


Fig. 2. Exchange rate of EURO i USD against PLN at the end of the month described between January 2002 and October 2015

Rys. 2. Kurs EURO i USD wobec złotego na koniec opisanego miesiąca w okresie styczeń 2002 – październik 2015

Source: Own study based on the National Bank of Poland data.

The figure shows very significant changes in this period. Particularly sharp changes can be seen in the exchange rates of EURO and USD against PLN between 2007 and 2009. The strongest in 2008 Polish zloty appreciated between 2004 and 2008 by about 33%, and depreciated sharply by about 45% in one single year, 2009, generating along with other factors a financial crisis. All entities dealing with finances and economy in Poland could be blamed here for neglecting rapidly strengthening zloty, in press this fact was even highlighted as a sign of the strength of Poland's economy.

It follows from the discussion presented that Polish entrepreneurs, and those in other countries must hedge themselves against impairment of their currency investments.

In trade settlement it is easier for businesses which normally use a currency that is accepted worldwide (EURO, USD).

2. Foreign exchange hedges used in Poland

An entrepreneur conducting business (trading) activity consisting in financial settlements in a currency other than PLN, execution of which is postponed, must hedge against impairment of the expected value of a contract due to exchange rate changes of the currency in which the contract is settled¹.

¹ Kryzys opcji walutowych w Polsce – wikipedia, wolna encyklopedia, https://pl.wikipedia.org/wiki/Kryzys_opcji_walutowych_w_Polsce.

It would be best for such an entrepreneur to settle in such a manner as not to bear any costs on this account, i.e. receive such payment as he expected. Some cost can be borne in this case, however, it cannot eat up all the profit expected from the transaction. The principle is minimising foreign exchange losses and agreements on fixed or stable foreign exchange rates, which will guarantee the profitability of the contract in the future. An entrepreneur may achieve this assumption, i.e. hedge his currency exposure in two ways:

1. by natural hedges,
2. by using financial instruments.

2.1. Natural hedging

A natural hedge, known also as natural hedging, involves undertaking any forms of activity that aim at avoiding or minimising foreign exchange risk by using means available during normal operation of a business without any financial instruments. Methods of natural hedging include²:

- invoicing foreign payments in a national currency,
- accelerating or postponing payments in a currency,
- netting, i.e. mutual compensation of obligations and receivables to reduce positions exposed to foreign exchange risk,
- using lines of credit (overdraft) in a foreign or national currency depending on the amount of mutual obligations.

This method of settlement between enterprises is often difficult, especially when enterprises vary in size. The smaller enterprise cannot effectively push through solutions favourable for it, e.g. imposing the system of settlement in PLN if the bigger partner demands EURO or USD.

2.2. External financial instruments used in foreign exchange hedging

Financial instruments means instruments for hedging of which derivative instruments are used. A derivative instrument is an instrument the price of which depends on the price of other instrument called an underlying. In the present case a foreign exchange rate is an underlying. The most popular instruments enabling foreign exchange hedging are futures contracts³, in particular:

- FX Forward contracts,
- FX spot transactions,

² Chłopecki A.: *Opcje i transakcje terminowe – zagadnienia prawne*. Warszawa 2001.

³ Kuczma K.: *Strategie zabezpieczania przed ryzykiem walutowym*, <http://archiwum.gf24.pl>.

- foreign exchange swap,
- currency options,
- various option structures created on currency options, including currency options unfavourable for an entrepreneur, also referred to as “toxic”⁴.

FX Forward is the simplest transaction hedging foreign exchange differences. It is a sale agreement concluded between contractual parties. Such parties most often are: an entrepreneur wishing to hedge itself and a bank acting as a hedger. One of the contractual parties undertakes to purchase a specific amount of currency at a specific price and time (at a future date). The price of the currency is at the level of the exchange rate at the time of transaction and is called a forward rate. The other party undertakes to sell other currency of the same value expected by the buying party.

In this way the entrepreneur hedging itself gets the same amount as it should be given by a commercial partner. Despite the simplicity of the principles in this method (this instrument), there are, however, some risks for both parties. If the exchange rate on the day of the contract settlement is the same as the exchange rate of the day of concluding the contract, nobody loses. If, however, the exchange rate on the day of the contract settlement is different from the exchange rate of the day of concluding the contract, someone must lose. The bank loses if the exchange rate is higher or the entrepreneur if the exchange rate is lower.

Such a foreign exchange hedging model is quite inconvenient, when the contractual parties (importer and bank) are subject governed by commercial law and aim at achieving profit. Therefore, the obligation of the parties to sell and buy out specific amounts of a currency at a specific price without a clear benefit for them is a burdensome obligation not ensuring any possibility to benefit from positive changes of exchange rates on the market. Due to the fact that Forward transactions are made on OTC market contracts can be drawn up freely, in particular, when determining the value and maturity date of a transaction. Such a condition is used by contractual parties (especially banks) to improve their position. Thus, the exchange rate of a transaction is determined on the basis of the current exchange rate on the interbank market, i.e. according to so-called SPOT rate. This rate is adjusted by forward points (swap points), which reflect the differences in the interest rate of two currencies of a transaction: base and quote currency. If the interest rate of the base currency is lower than the interest rate of the quote currency, then the forward points are positive, and the whole forward rate is described as quoted at a premium. If the interest rate of the base currency is higher than the interest rate of the quote currency, then the forward points are negative, and the whole forward rate is described as quoted at a discount. This method of hedging transaction can be called FX Spot transaction, referred also to as spot transaction. It is estimated that FX Forward and FX Spot currency transactions are the most often used instrument hedging foreign exchange risk,

⁴ Karkowski P.: Toksyeczne opcje – od zaufania do bankructwa. Warszawa 2009, s. 63-79.

especially by small or new businesses. The transaction simplicity being the incentive for its use is at the same time a disadvantage, because it excludes the possibility to make use of positive changes of currency exchange rates on the market.

Swap currency transaction is a combination of FX Spot and FX Forward transactions.

The transaction consists in simultaneous sale or purchase of a specific amount of a currency in FX Spot transaction and its repurchase or sale in FX Forward transaction. This transaction is often used by entrepreneurs to improve their financial liquidity in one currency at the expense of other currency with excessive liquidity.

2.3. Ordinary currency options

Forward transactions oblige the contractual parties to full implementation of a contract. Changing market environment was sometimes disadvantageous for one of the parties, and the only option was to withdraw from the contract. Such an opportunity is created by financial instruments called currency options⁵.

The definition of a currency option in literature [8] is as follows: “A currency option is an instrument giving its buyer the right (not obligation) to purchase or sell a specific amount of a currency at an exchange rate (strike price) determined at the time of the transaction at a specific future date (expiry / delivery date). In exchange for such a right the buyer of an option pays a price called the option price. As opposed to FX Forward transaction, a currency option is a right, which the buyer can but is not obliged to use, depending on whether the market rate at the maturity date is favourable for him or not.”

There are two types of options on the market⁶:

- call option – giving the right to buy a currency,
- put option – giving the right to sell a currency.

Exchange rate increase means that the call option purchase costs have been paid off, and after exceeding a specific rate (break even point) the call option starts to be profitable.

The opposite situation happens in case of purchase of put option. The option starts to pay for itself as the exchange rate falls. Up to this moment the only cost of the buyer is the cost of a premium for which he paid when buying the option.

Currency options are financial instruments of unique and asymmetrical construction. In return for the asymmetry of the rights and obligations, the more privileged party pays the other party a premium which becomes the premium option. The premium is at the same time the maximum profit the option writer can achieve. The amount of the premium depends on the

⁵ Kryzys...

⁶ Przewodnik po opcjach. Blue Capital Markets Limitet, 2013.

market forecast and the expected profit or loss the option writer can make or suffer in the event of its exercise.

The call option puts its buyer in privileged position. It gives the right to buy the option currency at a pre-specified price and time⁷. If it turns out that on the date of the exercise of the transaction the market exchange rate of a currency is more advantageous than the one determined in the sale contract, then the call option buyer may withdraw from the transaction and buy the currency on the market. He loses the premium, i.e. the purchase cost of the option. If, however, the buyer decides to its exercise, then the writer must sell the currency at the transaction price.

The put option favours the option buyer, who at the date of the exercise of the option has the right to sell a currency at the rate of the exercise and the option writer is obliged to buy it. Similarly to the call option, if the market rate is more advantageous for the buyer, he can withdraw from the exercise of the option and exchange the currency on the spot market. In such a case he suffers loss in the amount of the premium paid to the writer.

The option premium, as has been mentioned before is the price of the option. It is at the same time the maximum profit for the option writer and the maximum loss for the buyer. The premium is treated as insurance in the absence of the option exercise. It is always paid in advance. The amount of a premium depends on many factors, such as: currency rate forecast, probability of profit or loss, date of transaction settlement – the later the date the higher the premium, option type, etc. Professional settlement of all of these and other aspects requires involvement of many specialists of both contractual parties. Otherwise, it is extremely risky.

An advantage of this financial instrument is the minimisation of exchange rate risk. By using it, it is possible to make large profits, but also suffer unlimited losses. Currency options have become the tool for speculation, even gambling.

Call currency options are dedicated for importers, and put options are dedicated for exporters.

2.4. Other types of currency options

Currency options as financial instruments hedging currency exchange rate differences have developed in the financial market also in Poland. Many types of such options have developed, e.g.:

- European options, which can be exercised only at a pre-specified date,
- American options, which can be exercised at any time during the contract.

⁷ Brodowska-Szewczuk J.: Opcje walutowe w zarządzaniu ryzykiem kursowym a toksyczne instrumenty pochodne na rynku finansowym. Zeszyty Naukowe, Nr 105. Uniwersytet Przyrodniczo-Humanistyczny, Siedlce 2015.

3. Currency options harmful to entrepreneurs

In search for the cheapest and at the same time the surest methods of hedging against foreign exchange risk a large number of various financial instruments have been developed. The descriptions of those instruments can be found in rich subject literature¹¹.

The author of the article would like to draw your attention to harmful to entrepreneurs (enterprises) so called “toxic” currency options, which led to the bankruptcy of many businesses and financial crisis in Poland.

Currency options were introduced in Poland in 1996. They were offered by the following banks:

- ING,
- Polski Bank Rozwoju,
- Deutsche Bank,
- Polski Bank Inwestycyjny.
- At that time option transactions were made against USD and DEM. The number of transaction was small. Only after Poland’s accession to the EU in 2004 led to the rapid growth of these currency options. This course of events was undoubtedly affected by the increase in trade of Poland with other member states.

Year by year the inflow of different currencies to Polish business and outflow of a foreign currency abroad increased. Entrepreneurs, especially exporters and importers had to secure themselves against revenue losses due to exchange rate differences, especially when the dollar and euro exchange rate fell until mid-2008, and then started to grow rapidly (fig. 3).

Such economic situation of Poland led to financial disaster of many entrepreneurs. Improper financial instruments, and, in particular, lack of entrepreneurs’ knowledge of those instruments resulted in financial crisis¹².

Banks offered currency options as foreign exchange hedge to many enterprises. So-called cost-free options were particularly popular.

They were cost-free because entrepreneurs were simultaneously the buyers of options from the bank and the writers of the options, which were immediately bought by the bank. In this way, the entrepreneur did not pay the premium for buying out the options because the premium paid for buying put options was the same as the premium given by the bank as the buyer for writing the call option. Thus the name: zero-cost transaction. The equilibrium of the parties

¹¹ Kuczma K.: Strategie zabezpieczania przed ryzykiem walutowym, <http://archiwum.gf24.pl>; Piontek K.: Teoretyczna i rzeczywista wartość walutowych instrumentów pochodnych – rynek polski; Przewodnik po opcjach. Blue Capital Markets Limitet, 2013; Puszer B.: Opcje walutowe w strategii finansowej polskich przedsiębiorstw. Uniwersytet Ekonomiczny, Katowice.

¹² Komunikat KNF pt. Podstawowe wnioski z analizy zaangażowania przedsiębiorstw w walutowe instrumenty pochodne 11 marca 2009 r.

was only apparent, therefore, it was called “trap”. The entrepreneur had not only the right to sell the currency to the bank at a fixed price, but also the obligation to do it. The strategy of zero-cost risk reversal proposed by banks was in fact apparent. Banks forced entrepreneurs to sell put options at the price double the price of the call option sold by banks. Entrepreneurs not having such sums, required by banks, sold purely speculative put options that were not covered in the currency expected from the foreign partner. Thus, the amount, which the bank was entitled to buy from the entrepreneur was much higher than the amount which the entrepreneur was entitled to sell to the bank at a price more favourable to him. The entrepreneur is, therefore, exposed to much higher losses than the bank. However, the premiums for buying out call and put options were the same, which additionally confused the entrepreneurs. The bank is responsible for their valuation. Equal nominal values of those options result in unlimited losses of entrepreneurs as the writers of call options. The majority of the entrepreneurs were not aware of the threats posed by such options. They were supposed to hedge the entrepreneurs, and not to expose them to losses resulting in bankruptcy.

The reports of the Financial Supervision Authority (KNF)¹³, especially that of 11 March 2009 presenting conclusions from the analysis of the involvement of Polish entrepreneurs in currency derivative instruments shows that only 5-10% of them were involved in those transactions to make profit, i.e. their motives were purely speculative. The others acted for the enterprise's benefit.

The research carried out by the Faculty of Accounting and Finance of the Cracow University of Economics in collaboration with the Katowice University of Economics showed that the option contracts concluded between entrepreneurs and banks were drawn up on the basis of the methodology used by gambling organisers. This method is the basis of international macroeconomic market speculation¹⁴.

The option contracts between banks and entrepreneurs not only were not symmetrical, but also completely non-symmetrical. It was manifested in the fact that the barrier extinguishing the options concerned only the lower level (value of the currency exchange rate), advantageous for the bank.

The upper barrier, i.e. the one which were supposed to hedge the entrepreneur was not active at all, which means that the upper exchange rate of the hedged currency was not limited at all and theoretically could reach the highest values. Banks trained a special group of employees who used also elements of psychology to induce entrepreneurs to conclude option contracts. The fact that Poland had not implemented the principles of MiFID was used, although most of the banks had their mother companies in the countries, where these principles

¹³ Komunikat KNF z dnia 17 grudnia 2008 r. w sprawie wpływu walutowych instrumentów pochodnych na banki i spółki publiczne; Komunikat KNF pt. Podstawowe wnioski z analizy zaangażowania przedsiębiorstw w walutowe instrumenty pochodne 11 marca 2009 r.

¹⁴ Puszer B.: op.cit.

applied. Banks demanded that entrepreneurs wrote double the number of put or call options for one written by the bank. Those entrepreneurs who did not have such large currency revenues were in debt to banks not having a possibility to buy out or sell options.

The term: toxic currency options can be found in literature¹⁵ and is derived from the fact that they were harmful to entrepreneurs like poison. The instrument itself can be useful if used in an appropriate way¹⁶. Like any other financial instrument it can also be toxic if used inconsistently with the intended purpose.

Entrepreneurs remembered most the currency options called zero-cost corridor as the currency exchange rate hedge. In this definition there are at least two false expressions: the corridor without one wall, i.e. on one side there is no an extinguishing barrier, and zero costs turned into tremendous losses leading some enterprises to bankruptcy¹⁷.

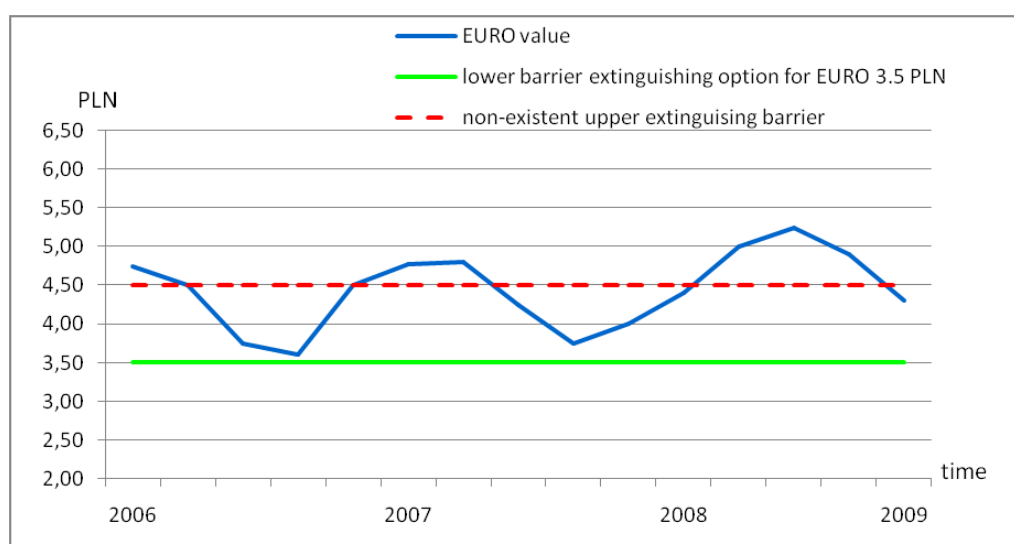


Fig. 4. Zero-cost corridor hedging currency rate of EURO

Rys. 4. Korytarz zerokosztowy zabezpieczający wartości kursowe EURO

Source: Own study, the figures shown are only indicative.

¹⁵ Karkowski P.: Toksyczne opcje – od zaufania do bankructwa. Warszawa 2009, s. 63-79.

¹⁶ Ibidem.

¹⁷ Ibidem.

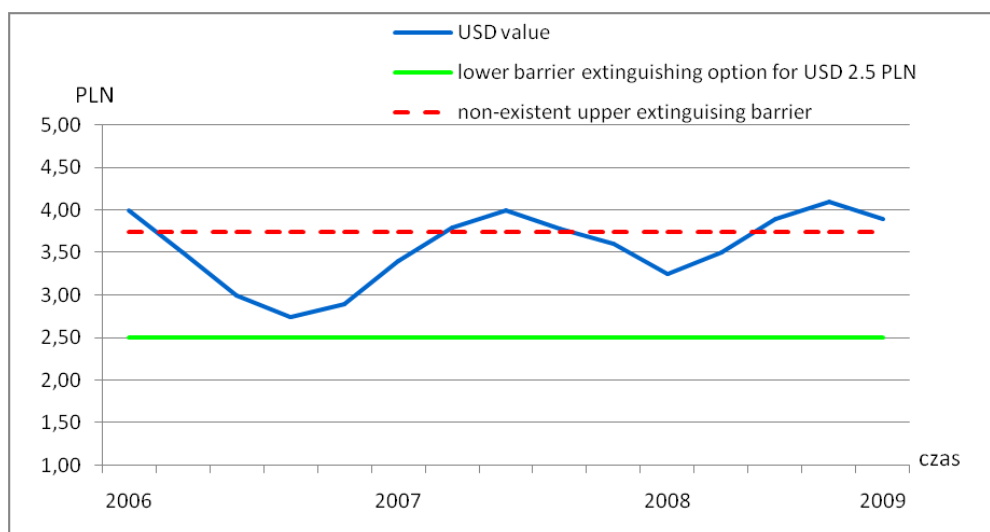


Fig. 5. Zero-cost corridor hedging currency rate fluctuations of USD

Rys. 5. Korytarz zerokosztowy zabezpieczający wahania kursowe waluty USD

Source: own study, the figures shown are only indicative.

In figures 4 and 5 there is no upper limit extinguishing the option after reaching the pre-set, upper rate of the currency – which would hedge the entrepreneur. On the other hand, the lower limits of the currency are emphasised, after reaching of which the option is deactivated. It is a hedge for banks¹⁸.

4. MiFID –Directive on markets in financial instruments

MiFID is an abbreviation of an English term: *Markets in Financial Instruments Directive*, meaning the principles of operation on the financial instrument market. It is a directive of the European Union 2004/39/EC and has been in force since 30 April 2004 in all 30 countries of the European Economic Area. It consists of 27 Member States plus Lichtenstein, Norway and Iceland. The main objective of MiFID is the protection of customers on European financial markets and the increasing and regulation of market competitiveness in this area¹⁹.

The guidelines contained in the directive apply to all banks, brokers, stock exchange, investment advisor and most of the institutions providing financial services to which the provisions of MiFID apply, in particular, currency option transactions, forward rate contracts and derivative instruments concerning transferring credit risk.

¹⁸ Ibidem.

¹⁹ Broszura informacyjna o wymogach MiFID dla klientów Banku Millennium S.A.; Fedorowicz M.: Implementacja regulacji MiFID do polskiego prawa rynku finansowego – wybrane zagadnienia teoretyczne i praktyczne. Stan prawny na 1 stycznia 2013 r.

Such radical regulations of financial instruments prove that they are very important. It is right to assume that the knowledge of them in many countries, which have accessed the EU recently is insufficient to consider the entrepreneurs from those countries as equal business partners. The area of cooperation with banks is particularly sensitive. In post-communism countries banks were state-owned and were the institution of public trust. There was even a saying: “safe as a bank”. However, present banks are almost entirely private, their objective is making profit not caring for the customer. Hence, the necessity of regulations protecting the weaker element in this pair, i.e. the customer-entrepreneur.

4.1. Implementation of MiFID into Polish law

The financial market regulation according to MiFID was completely implemented into Polish financial law on 21 October 2009. Only then the act of 4 September 2008 on trading in financial instruments and some other derivative acts entered into force. The said act implemented the MiFID directives. In this way the requirements of the MiFID directives were introduced to Polish financial law. Unfortunately the implementation of those directives were 2 years late. That period enabled the devastation of numerous Polish businesses by so-called toxic currency options and undoubtedly contributed to the increase of the extent of financial crisis in Poland. The implementation of the MiFID directive into Polish law was extremely difficult due to objective and formal obstacles, among others, reducing the term of the Polish parliament.

Timely implementation of the directive would have protected many customers of banks and investment firms against losses, because they would have been subject to stricter information obligations towards customers. Then, they probably would not have bought those unfavourable currency options. The customers of banks were in that case the clearly weaker party comparing to the entities professionally dealing with bank and investment services²⁰.

The implementation of the MiFID directive into Polish financial law revolutionised the relations between customers and investment firms. Particularly important is the introduction of the provisions on the classification of customers. The assessment of the customer consists of many provisions putting him on a higher level of care for his interest as it was before. In this situation the principle “*best execution*” should be applied to the customer. This principle means the obligation to execute orders for customers based on the best execution and due diligence²¹.

Banks and firms under the principle of MiFID take proper care of the customer. If the customer, however, thinks that his knowledge enables more independence, then he should undergo a clearly defined examination procedure to qualify to a higher class of bank customer.

²⁰ Fedorowicz M.: op.cit.

²¹ Ibidem.

The implemented regulations of MiFID created conditions improving competitiveness on the financial instrument market.

4.2. Implementation of MiFID in banks and investment firms

Every bank and other economic operators obliged to observe the regulations set out in MiFID specify their own restrictions and conditions applicable in their firms. For example, Bank Millennium S.A. made an information brochure for its customers, in which the requirements of MiFID have been described. The contents of the brochure included the following issues:

1. what is MiFID?
2. catalogue of financial instruments and products covered by MiFID,
3. provision of investment services to the bank's customers,
4. the principles of MiFID,
5. information about the bank,
6. final provisions.

In the further parts of the information brochure the rights and obligations of the bank's customers and references to the most important provisions of MiFID have been described in detail. Customers who would like to cooperate with the bank on derivative financial instruments should read carefully that document.

5. Social assessment of activities of banks and investment firms related to currency options unfavourable for entrepreneurs

The social assessment of that activity is generally negative. Banks taking advantage of their knowledge of the operation of derivative financial instruments, in particular "toxic" currency options led dozens of Polish businesses to bankruptcy or on the verge of bankruptcy. The resultant losses of the Polish economy are estimated at about 160 billion PLN²². About 20,000 businesses were affected by the negative consequences of toxic currency options²³.

Between 2007 and 2009 when the disaster happened, banks were very active in the field of marketing. They ran very aggressive campaigns almost forcing entrepreneurs to enter into unfavourable option transactions. The marketing campaigns were run by trained people who

²² Komunikat KNF z dnia 17 grudnia 2008 r. w sprawie wpływu walutowych instrumentów pochodnych na banki i spółki publiczne; Komunikat KNF pt. Podstawowe wnioski z analizy zaangażowania przedsiębiorstw w walutowe instrumenty pochodne 11 marca 2009 r.

²³ Brodowska-Szewczuk J.: op.cit.; Puszer B.: op.cit.

used also the elements of psychology for that purpose. It was just before the introduction of the principles of MiFID. In hindsight, we consider it to be unfair, because banks operating in Poland almost entirely belong to banks seated in western Europe, where the principles of MiFID had been in force before 2007. An argument that it was directed against Polish enterprises, and consequently against the Polish economy is the fact at that time such a campaign was not organised in any other European country.

Entrepreneurs wanted to recover at least part of the lost capital bringing actions to courts for compensation. So far without success.

In my opinion both parties are guilty, but the banks as the stronger partner are more guilty.

6. Conclusions

1. The article briefly presents the methods of foreign exchange hedging used by enterprises. There are two main methods:
 - natural,
 - external.
2. The natural methods consist in the fact that the entrepreneur defends himself against possible effects of exchange rate changes and does not use related bank services. As a rule those methods are used by small businesses, which do not yet have enough financial means to accept the game proposed by banks.
3. The external methods include all Forward hedges and currency options. In those methods a bank or investment firm connected with the bank is the partner of the entrepreneur. Many methods of foreign exchange hedging can be distinguished here. Most of them is positive, actually protecting the entrepreneur against losses.
4. The Polish economy suffered vast losses due to so-called toxic currency options. The resultant losses are estimated at about 160 billion PLN.
5. As a result of using such currency options not only financial losses in the Polish economy, but also about 1 million job losses occurred, because many entrepreneurs went bankrupt. The exact number has not been determined, but only the strongest survived. Therefore, the number of the businesses that went bankrupt must be immense. About 20 thousand enterprises were affected by the negative effects of toxic currency options²⁴.
6. The then government, which failed to timely adopt and implement the EU MiFID directive into Polish law, is also guilty of such a state of affairs. The delay was 2 years. Banks took advantage of that fact with ruthlessness.

²⁴ Ibidem.

7. That does not justify the entrepreneurs themselves, who joined the game without the knowledge of its rules. We should not join a game if we do not learn its rules. It is very important to educate entrepreneurs in the scope of their business activity.
8. The analysis carried out in the article indicates that the euro zone needs to be joined as soon as possible.

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