

## INTERNET CURRENCY EXCHANGE SERVICES AS AN ALTERNATIVE TO TRADITIONAL FINANCIAL INSTITUTIONS

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### **Abstract:**

This article tackles with the new market situation of increased demand for the currency which is reflected in supply in the form of many online currency exchange platforms. Over the past few years there is a new stimulus to the market to look for alternative ways of getting foreign currencies. The background of this situation is the economic and social downside of foreign currency borrowers concerning the volatility of exchange rates and also the institutional changes in Poland. Premised on theoretical currency specifics and credit markets, the observational aspects of those fields within the economic and social drawback background are mentioned. The lower economic profitability of classic ways of exchange in banks and exchange offices in conjunction with legislative rearrangements have resulted in the creation of a distinct segment for on-line currency exchange services. The low creation barriers of internet sites, low operating cost as well as practically unlimited pivoting their business models makes them simply accessible, however entails additional risks. An analysis is being made tackling with specificity and cost-effectiveness for the customers' utilization of mentioned services compared to these offered by traditional institutions. The analysis might confirm the adopted hypothesis that the services provide more favourable exchange rates compared to those offered by traditional institution. Therefore, they play a crucial economic and social role in the current situation concerning credit and currency markets. The model of the whole research is elaborated and preliminary results will be presented during the conference Makelearn & TIIM International Scientific Conference 2017 in Lublin.

*Keywords: internet, currency, exchange, services, banks*

## 1. THE IDEA OF ONLINE CURRENCY EXCHANGE PLATFORMS

Over the past few years there has been a new market impulse to look for alternative sources of foreign currency exchange. Apart from the increasing influence of globalization, the quartile of freedoms in the European Union (i.e. the free movement of goods, services, people and capital), indirectly, big spread of foreign currency loans denominated in foreign currencies has resulted in making this problem audible in mass media. Indirectness of this factor is, due to the fact that only in the fact of sudden and relatively sustained growth of the Swiss Franc value along with the high spreads of heavily drained portfolios of holders of such loans, the problem of foreign borrowers became a social dilemma, publicized by the media and discussed by politicians. In numerous press materials, television coverage and interviews with experts, people argued about the viability of possible currency conversions and the cost of each foreign currency loan instalment. The resulting social and media atmosphere influenced the decisions of the Polish Financial Supervision Authority and politicians. The changes in legislation have created circumstances to development of a new market niche – online currency exchange platforms based on different business models.

The current variety of opportunities for obtaining foreign currencies on the Polish market, created in the last few years, together with the changes in Polish legislation, created an opportunity to analyse the situation of Polish foreign currency borrowers, to closely monitor legal changes and their consequences for citizens. These topics require the analysis of the online currency exchange platform market, and, in particular, their offer compared to the alternative solution, which are traditional institutions, mainly banks and traditional exchange offices (Miształ, 2009).

Faced with unfavourable changes in exchange rates and high commissions of banks, the demand for cheap and secure ways of getting currencies was created. The supply response of the market is the creation of dozens of exchange platforms on the Internet. New solutions are also competitors for traditional exchange offices which have lost their dominant position in relation to banks after their profitability was exceeded, as they were unable to lower their commission due to the high cost of running a stationary point of currency exchange. However, facing increasing exchange rates, the borrowers were expecting even higher levelling of exchange rate swaps by the money exchangers. The high demand for foreign currencies by both borrowers and entrepreneurs trading abroad has accelerated the development of online currency exchange platforms. Their creators and owners have noticed the emerging, prospective market niche. However, one has not only copied the traditional exchange office business model into the virtual world. One started looking for new, attractive solutions for foreign currency exchange.

Despite the innovativeness of these solutions, there is no lack of sceptical views on the danger of fraudsters using the credit and currency markets, as online currency exchange platforms are not subject to supervision and the barriers to entry are extremely low (Hejduk 2013). The way in which this type of service operates itself raises legitimate doubts in the field of safety. The user, after registering on the site, entrusts his money to the platform by making a transfer to the service account. However, the bought currency is transferred to the user's account only after a certain time - from a few minutes to 24 working hours. In this case, the basis is the trust of the user that the funds are secure during the financial operation.

The relatively short time of market presence is certainly not conducive to building trust on the market. Despite this situation, Polish currency exchange services use different arguments. The main requirement used by most services, which is to certify the safety of use of the service, is the fact of his entry into the register of exchange activities conducted by the President of the National Bank of Poland. Actually, this is not a guarantee of safety, as this entry is only a formality resulting from the foreign exchange law rather than a security for users. In addition, for example, owners of the Internetowykantor.pl platform report that they operate as two individuals in the form of a public partnership. This means that the partners are responsible for the obligations of the company with all their assets. In turn, the owners of Cinkciarz.pl emphasize the possession of a redeemed policy worth 2 million PLN owned in one of the largest insurance companies. However, the value of the collateral presented cannot be objectively assessed as there is no exclusion list of liability of the insurer. The DomWaluty.pl Platform emphasizes that the security of the transaction from the technical side is ensured by the brokerage house which is the co-owner of the service. However, this does not matter to the security of the funds paid by users. L. Dajnowicz, spokesman for the Polish Financial Supervision

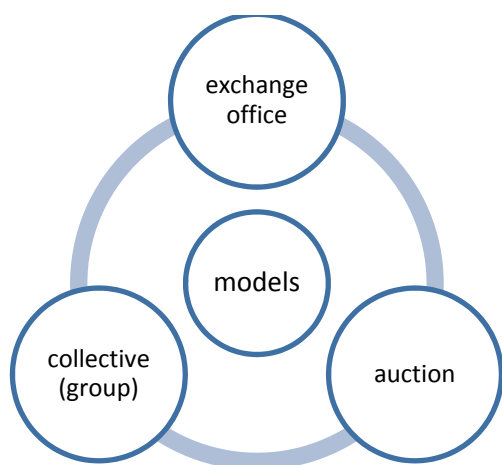
Authority, concludes that the fact that the Authority oversees the company's shareholder does not determine the Commission's oversight of the company's activities (Ceregra, 2011).

## 2. CLASSIFICATION OF ONLINE CURRENCY EXCHANGE PLATFORMS

Among the online currency exchange platforms, some modifications have been made to the way currency is exchanged, giving decent returns to internet site owners on the one hand, and, on the other, even greater opportunities to save on currency conversion. Therefore, there are three main types of services:

- 1) exchange office model,
- 2) auction model,
- 3) collective (group) model.

**Picture 1:** Main models of online currency exchange platforms



Source: own elaboration

Ad 1) The currency exchange model is the simplest and most common pattern of the online currency exchange platforms. Its assumptions are based on a stationary, real exchange. In its virtualized form, the service also acts as an intermediary, on the one hand buying the currency at a lower price, and on the other selling it at a higher price. Service profit is based on the difference between the selling price and the purchase price. All operations are made by electronic transfers. The whole operation of the site is automated. The authenticity of the user is based on the account holder's data from which the transfer was made to the site. Virtual currency exchange is more convenient for users as they can safely exchange currency in a short time. On the other hand, for service owners, the form of service imposes a minimization of operating costs compared to a stationary establishment (Doligalski, 2014).

Ad. 2) On the Polish online currency exchange platform market there are few services based on the auction model, e.g. Walutomat.pl. The main characteristic distinguishing them from the exchange office model is the role of the service in the currency exchange process. In the currency exchange model, the service is an intermediary, and thus it acts as the subject - in the legal sense it acquires and sells the currency. On the other hand, in the auction model, the service is only an exchange platform, providing users with the infrastructure and functionality of the software to make a smooth exchange at a rate that satisfies both parties of transactions. The analogy of the auction model should be sought in the models of such services as Allegro.pl or eBay.com. The service - the currency exchange auction platform - applies a commission on each of the quoted amounts, which represents revenue for it. The entire operation of the service is automated and cash movements are carried out exclusively by electronic means (Doligalski, 2013).

Ad. 3) Platforms in the collective (group) model, as opposed to the two previous models, are dedicated exclusively to people repaying the loan in foreign currency. It uses the effect gained in group shopping services, e.g. Groupon.pl or Citeam.pl. Users request to exchange a certain amount of money (credit installment) into another currency. Thanks to the wholesale exchange of large sums, customers get a

better exchange rate. The service earns a certain commission on the exchange. The role of the site does not come down to the subject of the transaction, but it also does not have a passive function in exchange because it purchases the currency on behalf of a group of users. The service therefore plays an active role as the currency exchange platform. Also in this model, all operations of the site are automated and cash operations are carried out exclusively by electronic means (Hejduk, 2013).

**Table 1:** Comparison of functioning characteristics of exchange platforms on the Polish market

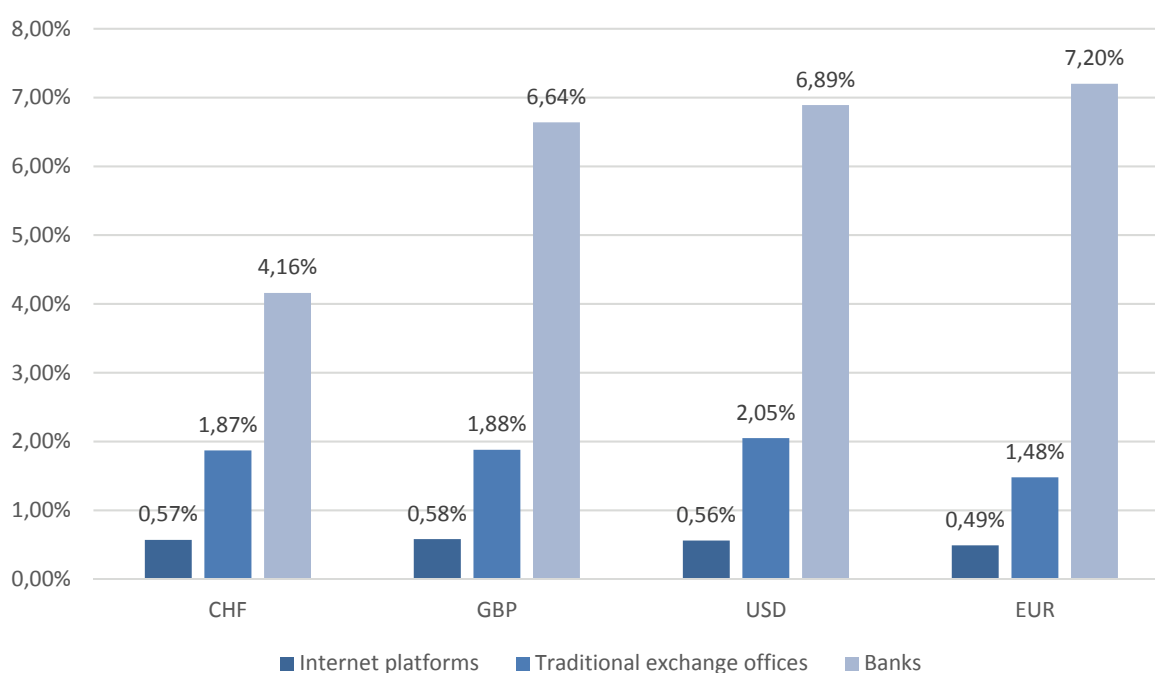
Feature	MODEL		
	exchange office	auction	collective (group)
Role	subject	passive	active
Users	all according to the regulations	all according to the regulations	only borrowers
Pattern	traditional exchange office	auction sites	group buying services

Source: own elaboration

### 3. THE MODEL OF OFFERS' PROFITABILITY COMPARISON OF INSTITUTIONS EXCHANGING CURRENCIES IN POLAND

According to the promotional information posted by the Internet exchange platforms, their offerings largely outweigh the attractiveness presented by banks or traditional currency exchange offices. In recent months, one created many websites mainly to make comparisons between the offers of these three groups of foreign currency exchange institutions. Most of these sites are purely promotional. They make money on advertising or referral to specific institutions, which largely undermines the market, and certainly reduces the functional aspect for customers, and even introduces disinformation. One can come across the thesis that, according to research (kurencja.com, 2017), which is periodically carried out by one comparator, currency spreads for the most popular currencies (euro, dollar, pound and Swiss franc) in online exchange are only 0.4-0.6%. While spreads at traditional exchange offices for the same currencies are 1.5-2.0% and in banks up to 6-7%. It is worth noticing that the rate of the currency converter on the Internet is the better, the more important (more often referred to) is the currency. And so, the euro exchange rates that are most frequently exchanged have the lowest spreads in all currencies (less than 0.5%) (kurencja.com, 2017).

**Picture 2:** Spreads in exchange offices and banks at the end of Q3 2016



Source: own elaboration based on <http://kurencja.com/> (20.03.2017)

The research, the results of which have been presented above, have not been precisely described, there is no research sample or methodology. Therefore, in this context, the undeveloped field to conduct professional scientific research on the cost-effectiveness of using the above mentioned three groups of institutions must be discerned. To develop this area, the author of the article has started to conduct market research, the purpose of which is to collect information on buying and selling rates by the subjects to determine the profitability of their offer. The initial results of the research model described below will be presented at Makelearn & TIIM International Scientific Conference 2017 in Lublin. The research carried out as well as the conclusions drawn from it will be taken from the perspective of the customer. The hypothesis is to say that online currency exchange platforms offer better currency market conditions (lower % spread) to customers than banks and traditional foreign currency exchange offices in Poland. This study aims at obtaining an overview of the foreign exchange market in Poland in a categorized approach. The gained number of observations will give the opportunity to draw objective conclusions about this matter - both in time dimension and quantitatively, i.e. it will cover market rates on Forex, the National Bank of Poland, all commercial banks in Poland (38 banks), all internet exchange platforms and available exchange rates of traditional exchange offices by province. Data is captured using a specially designed database program. The adopted statistics will be used to illustrate the relationship between the categories.

Retail purchase and sales quotes obtained during the study come from the official websites of individual subjects or online reports/comparisons. At wholesale exchange, most banks reserve the possibility of individual negotiation of the course in consultation with the relevant department of the bank, most often the Department of Fiscal Product Sales. The limit varies by bank, but the most common limit is the \$ 10,000 or € 10,000 limit, for example:

- PKO Bank Polski S.A., Nordea Bank Polska S.A. - min. \$ 10,000 or its equivalent in another convertible currency converted at the current interbank market rate,
- ING Bank Śląski S.A. - more than € 10 000 or its equivalent in another convertible currency converted at the current interbank market rate.

Similar possibilities to negotiate better terms of transactions are offered by traditional exchange offices, except that the limit amount is much more different than among banks. In this regard, a sample of randomly selected cantors from all over Poland was tested. The average limit amounted to about 11.000 PLN, with very high variance in observation (standard deviation).

Each of the five groups of entities is tested for the four "foreign exchange" ("BID") and selling ("ASK") rates offered: euro (EUR), US dollar (USD), Swiss franc (CHF) and sterling (GBP). The choice of these currencies should be justified by their greatest popularity on the Polish market as well as by the fullest availability of their quotations by the audited entities. On the basis of the aggregation of the two rates of each four currencies, the spread would be calculated in each case in terms of absolute spreads and % spread ("Spread %"). The spread size is the difference between the selling price ("ASK") and the buying price ("BID"), which shows the absolute profit of an entity for the exchange of a foreign currency. (Zajac, 2001)

In turn, the statistics % spread is calculated according to the following formula:

$$\text{Spread \%} = \frac{\text{ASK} - \text{BID}}{\text{BID}} * 100\%$$

The "Spread %" statistics are used to assess the competitiveness of a given subject. The lower the spread, the better the situation for the customer. This indicator appears to be more useful than absolute spread in order to compare the offer attractiveness of individual entities (Marcinkowska-Lewandowska, 2009).

Standard deviation and variation coefficient will be calculated at the end of each group as well as on a holistic basis. The standard deviation, although not directly interpretable, is used as a common measure of variation. The greater the variance of observation, the more deviations of the value of a given feature are greater than the arithmetic mean and that is the greater the variance and the standard deviation, which is the positive square root of the variance. The use of the coefficient of variation is justified by reference to the magnitude of the standard deviation relative to the average level of the feature and the presentation of the result in relative form for comparative purposes (Podgórski, 2005).

## 4. SUMMARY

The unattractive nature of the traditional ways of foreign currency exchange in banks or exchange offices and legislative changes have resulted in dozens of exchange platforms on the Internet. The small barriers to set up platforms on the Internet and the costs of their operation make these services easily accessible and cheap, but at the same time it carries additional risks. Internet currency exchange platforms are classified into three categories: exchange office model, auction model and collective (group) model. Large business space in the global network allows for virtually unlimited creation of their business models. High intra-category heterogeneity forces the need for a thorough analysis of the operating conditions of the site in order to choose the most customized for a user. Due to the presence of many commercial analyzes on the market whose reliability is doubtful, it is postulated that professional research will be carried out to provide a cross-sectional analysis of online currency exchange platforms in the view of specifics and cost-effectiveness for customers. One wants to verify the hypothesis that currency exchange platforms offer more favorable currency exchange conditions compared to the offer of banks and traditional exchange offices. A model study is underway and preliminary results will be presented during the conference Makelearn & TIIM International Scientific Conference 2017 in Lublin.

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