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Hedging foreign exchange risk in Belarus: Selected issues

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Hedging foreign exchange risk in Belarus: Selected issues

Executive Summary

In 2015, Belarus made the very important strategic decision of moving towards a floating exchange-rate regime. This was a right and long overdue decision; at the same time, it gave automatically rise to a number of challenges. One of these challenges is the issue of increased day-to-day volatility of the exchange rate, which has an impact on many companies in the real and financial sector of the economy in the spheres of trade and investment. During 2015-2016, the daily percentage change of the Belarussian Ruble against the Euro sometimes amounted to around 6%, to the Russian Ruble – 4-5%, and to the USD – 2-3%. Markets to deal with this volatility, where such risks are transferred to other participants who are willing to carry them are largely absent at the moment, and are in urgent need for development.

It should be noted that the process of hedging follows some clearly defined steps. First, it starts with the strategic question whether to hedge relevant FX exposure or not (step 1). In making this decision, relevant costs need also to be taken into account. If the answer is yes, necessary data need to be collected, forecasted and assessed during step 2, which addresses the question what concrete exposure to hedge. Step 3 then develops a concrete FX hedge plan and executes it. In the last step 4, the accounting treatment of the hedge is clarified. In international accounting, hedging transactions by companies can qualify for a special accounting treatment (“hedge accounting”) if they follow certain rules. The conditions for this privilege are written down in detail specific standards for each accounting system, e.g. IAS 39 (IFRS) or FAS 133 (US-GAAP).

Empirical information about corporate FX hedging decisions is difficult to obtain. Existing surveys point to the fact that export-oriented companies as well as multi-national-corporations (MNC) hedge 85-95% of their FX risk exposure, whereas domestically-oriented companies hedge only 10-15%. Also the time horizon for hedging decisions for exporters/MNC is longer, and can consist of several years. In general, hedging has grown in importance over the last years, which futures/forwards and cross-currency swaps mainly used. Options and more exotic structures are less frequent, and used only by bigger companies.

In emerging and transition countries, the development of FX derivatives market often follows spot market development. At the same time, complementary financial markets are important, starting from money markets/T-bills, as well as (government and corporate) bond and stock markets. In particular the money market fulfils an important role for a fair pricing of forwards/futures via covered interest parity.

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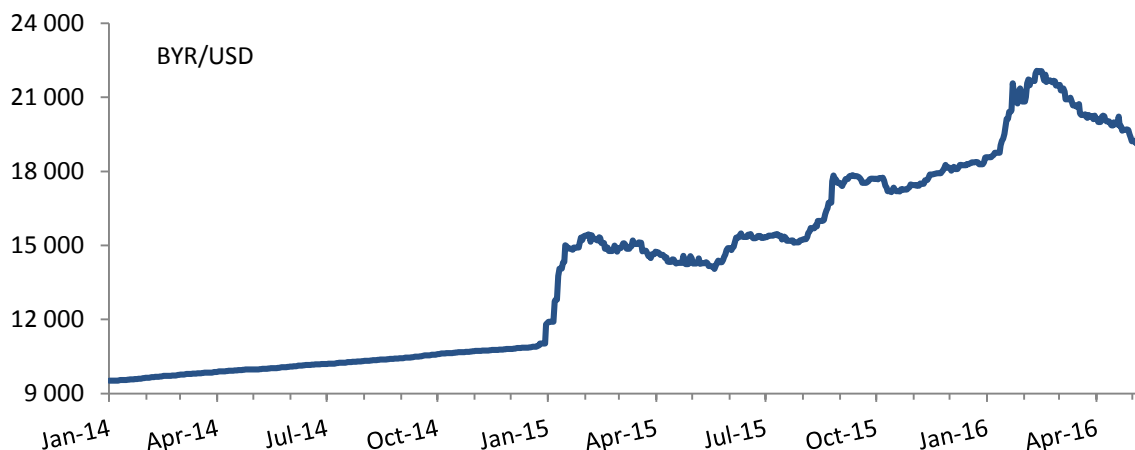
Contents

1	Introduction.....	5
2	Rationale of the introduction of FX hedging in Belarus.....	5
3	Corporate Hedging decisions.....	7
3.1	Accounting for FX risk hedging operations.....	7
3.2	Appropriate degree of risk exposure covered.....	8
4	Complementary financial markets	9
4.1	The global FX derivatives market	9
4.2	The need for complementary financial markets	9

1 Introduction

In previous work¹, we discussed the general reform steps necessary to establish a functioning market for foreign exchange (FX) derivatives in Belarus. The establishment of such a market is a topical issue for the country, as FX volatility has increased significantly since January 2015, when Belarus moved towards a flexible exchange rate (Figure 1). While this move is positive from an economic point of view, as it allows market forces to determine the exchange rate; markets for FX derivatives (futures, forwards, swaps, etc.) are needed to deal with this new volatility.

Figure 1: Exchange rate vs USD



Source: National Bank Belarus

This paper is a follow-up to this discussion, and focuses on international experience in a number of selected issues, which are crucial for a functioning FX derivatives market². In the following, we concentrate on three areas: The rationale for the introduction of FX hedging mechanisms in Belarus (chapter 2); international experience regarding corporate FX hedging decision (chapter 3) and the creation of complementary financial markets (chapter 4), which are needed for a liquid and efficient FX derivatives market.

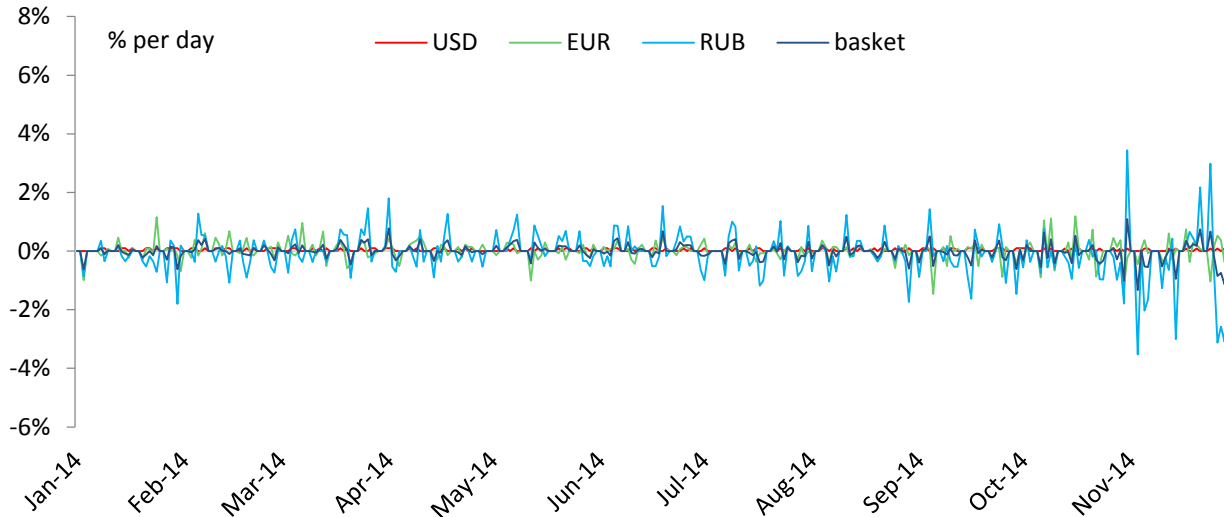
2 Rationale of the introduction of FX hedging in Belarus

At the beginning of 2015 the National Bank of the Republic of Belarus dropped the peg of the Belarusian Ruble to the US dollar and introduced on January 9 the mechanism according to which the exchange rate should be guided by a currency basket based on trade shares (the share of the Russian Ruble was increased to 40%, while US dollar and Euro were decreased to 30% each). This mechanism was aimed to minimize foreign exchange interventions of the National Bank and ensuring that the dynamics of the exchange rate would be determined by the foreign exchange market supply and demand. It marked the beginning of a movement to more flexible exchange rate policy without any established targets neither for a level of exchange rate nor for its fluctuation (Figure 1). However, the National Bank monitors the developments in the FX market in order to limit a daily volatility of currency basket.

¹ See PB/06/2015: http://www.get-belarus.de/wordpress/wp-content/uploads/2014/10/PB_06_2015_en.pdf

² Some of this issues were briefly covered in PB/02/2016: http://www.get-belarus.de/wordpress/wp-content/uploads/2016/02/PB_02_2016_en.pdf

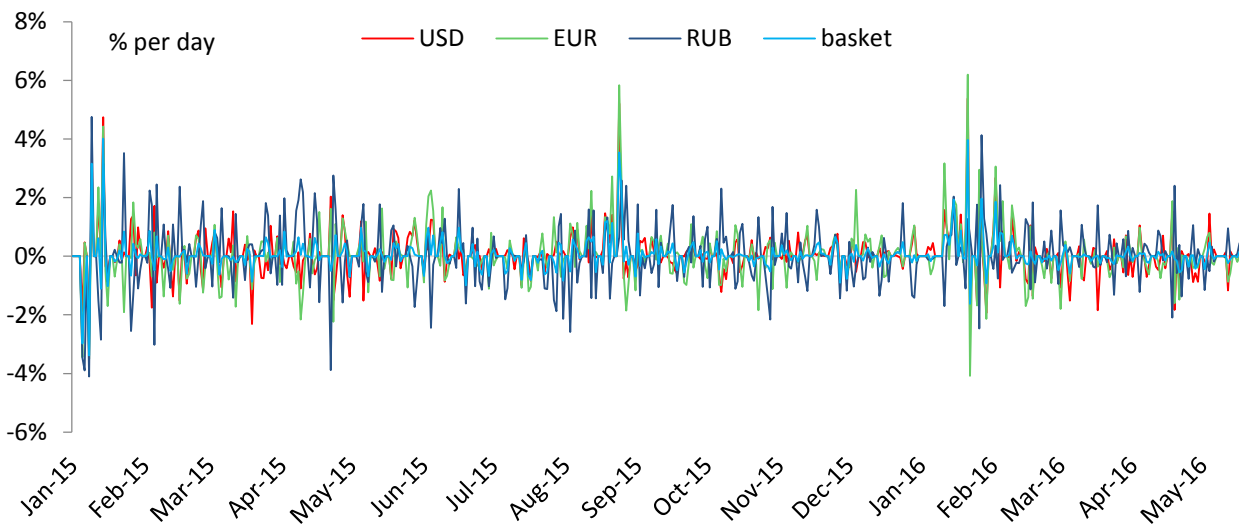
Figure 2: Changes in exchange rates included in the basket, and the basket (equal weights), Jan-Nov 2014



Source: IPM Research Center calculations based on NBRB data

Yet, due to the high dependence of the Belarussian economy on the external environment, e.g. spill over effects of Russia’s economy contraction, the decline in commodity prices, in particular, oil and potash fertilizers prices, as well as internal economic issues, the volatility of the Belarussian Ruble has constantly increased. As can be seen from Figure 3, during 2015-2016, the daily percentage change of the Belarussian Ruble against the Euro sometimes accounted for around 6%, for the Russian Ruble – 4-5%, and for the US dollar – 2-3%.

Figure 3: Changes in exchange rates included in the basket, and the basket (weights 2015), Jan 2015-May 2016



Source: IPM Research Center calculations based on NBRB data

Taking into consideration that many companies in Belarus are highly depend on exports and imports, are required to surrender 30% of their export proceeds and have costs and revenues in different currencies, such unexpected foreign currency fluctuation negatively impacted them, increasing the risk of potential losses due to swings in the currency. It raises the issue of how to manage company’s currency risk and protect their revenue due to foreign exchange volatility.

It should be noted that it is not only the problem of Belarussian firms, currency risk is now at the forefront of the issues affecting companies around the world. Therefore, more and more of them are hedging their

currency exposure. JPMorgan Chase survey revealed that U.S., European, and Japanese companies hedged a record 40% of their currency exposure.

3 Corporate Hedging decisions

In this chapter, we try to answer two different issues that relate to corporate (i.e. real sector) FX hedging decisions:

- a. How are German/international enterprises accounting for their FX risk hedging operations? What normative documents/regulations apply? (3.1)
- b. What is the appropriate degree of risk exposure that ought to be covered by the use of FX derivatives in real sector enterprises? (3.2)

3.1 Accounting for FX risk hedging operations

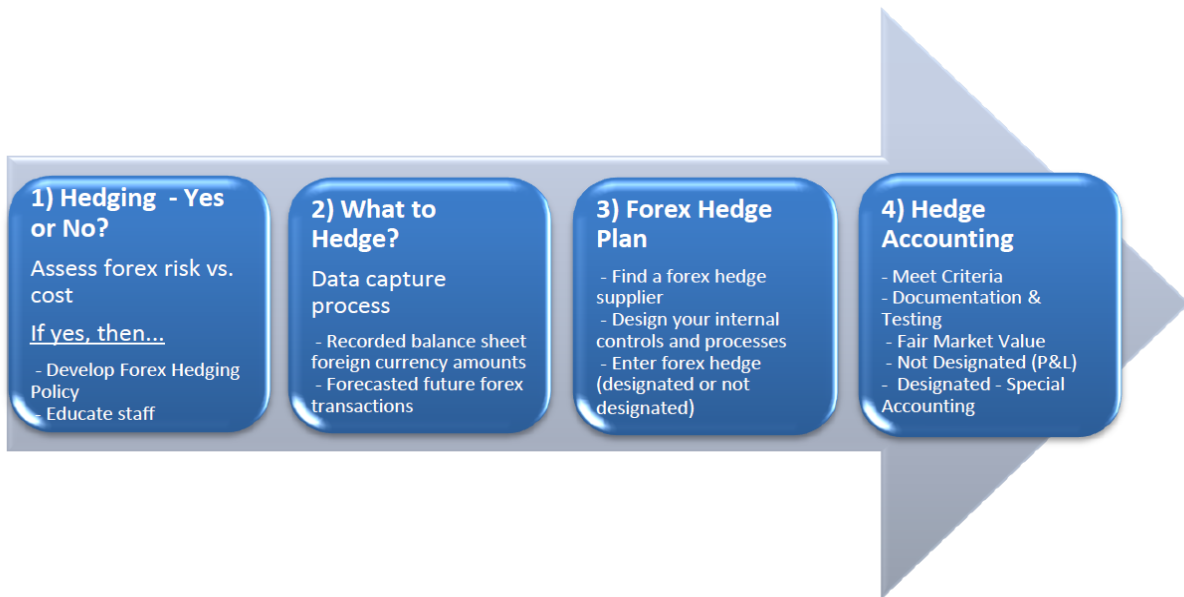
In general, companies are free to use FX hedging transactions to reduce (or eliminate at best) their respective FX exposure. If a specific hedging transaction meets certain criteria outlined in the applicable accounting standards, there is a special accounting treatment called hedge accounting permitted. However, this is a „privilege“ and not an automatic right granted. International companies report according to different accounting standards (German GAAP, IFRS, US GAAP to name the most important), but the treatment of hedge accounting is roughly similar in different standards. In IFRS, the relevant standard that regulates hedge accounting is IAS 39 „Financial Instruments: Recognition and Measurement“, which will be replaced in 2018 by IFRS 9. In US GAAP, the relevant standard is FAS 133 „Accounting for Derivative Instruments and Hedging Activities“ (amended by FAS 161).

Accounting standards allow hedge accounting for three different designated FX hedges:

1. A cash-flow-hedge is designated for a highly probable forecasted transaction, a firm commitment (not carried on the balance sheet), FX cash flows of a recognized asset or liability, or a forecasted intercompany transaction.
2. A fair-value-hedge is designated for a firm commitment (not carried on the balance sheet) or FX cash flows of a recognized asset or liability.
3. A net-investment-hedge is designated for the net investment in a foreign operation.

The guiding principle of hedge accounting is the recognition of the gain/loss of the hedged item and the gain/loss of the hedge into the income statement at the same time. Hedge accounting requires a large amount of compliance work, involving documenting the hedge relationship and proving that the hedge relationship is effective. The following figures shows the different steps involved towards hedge accounting:

Figure 4: Steps towards hedge accounting



Source: Oanda, *Forex Hedge Accounting Treatment*

As figure 2 clearly shows, hedge accounting is only the last in a series of prior steps that a company needs to go through. It starts with the strategic question whether to hedge relevant FX exposure or not (step 1). In making this decision, relevant costs need also to be taken into account. If the answer is yes, necessary data need to be collected, forecasted and assessed during step 2, which addresses the question what to hedge. Step 3 then develops a concrete FX hedge plan and executes it. Only the last step 4 then deals with the actual hedge accounting.

3.2 Appropriate degree of risk exposure covered

How individual companies in the real sector actually hedge their FX exposures is from an empirical point of view not easy to answer, as there is a lack of „hard data“. This is not surprising, as such information do not need to be made public, and often should consider a business secret from the companies point of view. However, there are some regular anonymous surveys and case studies conducted by investment banks and other agencies about this question. The problem here is that these results are also often not publicly available, but only distributed to their clients.

An exemption is the survey conducted by Greenwich Treasury Advisors among their client base, which is public and which collected the following responses:

Table 1: Survey on corporate hedging

% who do FX hedging	10-15%	85-95%	90-95%
Hedging time horizon	Fiscal year	1-2+ years	1-3+ years

Source: *Greenwich Treasury Advisors 2008*

Companies are grouped into different categories (domestically-oriented, export-oriented, multi-national corporation (MNC)), and among these categories the share of companies that hedge, as well as the time horizon differs: While exporters as well as MNC hedge almost all of their exposure, domestic companies do that only to a very limited degree. Also the hedging time horizon differs, with exporters/MNC taking a longer time perspective than domestic companies. However, it should be kept in mind that even among similar groups of companies; differences are possible due to different financial risk management policies or difficulties in forecasting FX exposure (e.g. their cash-flow stream), which are not captured in table 1.

Furthermore, despite the limited information base, some additional stylised facts can be distinguished regarding hedging practices by corporates:

1. Due to increased FX volatility around the globe, and a growing trend of internationalisation for many companies, the topic of FX hedging has become more urgent over the recent past. For many companies, FX risk is considered a „non-core“-risk that shareholders try to avoid, i.e. they expect the company management to deal with it (e.g. by using FX derivatives).
2. Companies with FX exposure in sectors that have narrow profit margins (e.g. in commodities like agricultural products) typically hedge most of their exposure.
3. In MNCs that operate in many countries, typically only the net FX exposure versus the reporting currency (USD, EUR) is (fully) hedged.
4. The main hedging instruments used are forwards and/or futures and cross-currency swaps; less so options or more sophisticated (exotic) structures. Bigger companies will be more likely to use options and exotic structures than smaller companies.

4 Complementary financial markets

4.1 The global FX derivatives market

The global FX derivatives market³ is mainly an over-the-counter (OTC) market, where over 80 % of turnover is generated outside organized exchanges. Another feature is the strong concentration of the market among a few key players. Currently, about 12 to 14 large international banks dominate the world's electronic FX derivatives market. Other, smaller or regional banks obtain their liquidity and prices from the former, which is of course more expensive for their customers. Trading between the market participants is largely automated. Electronic trading platforms are connected to each other using the "FIX protocol".

Turning to the current situation in emerging markets, FX derivatives trading is off-exchange throughout this market segment. The market is usually only used by smaller banks (niche market!). The market carries higher risks, which results in higher spreads. Therefore, only risk-tolerant institutions like hedge funds trade and participate in such products from an international point of view.

4.2 The need for complementary financial markets

In many emerging markets and transition economies, deep and liquid FX markets were a key building block of the move from fixed to flexible exchange rates. This relates to spot markets, but also to derivative markets.

However, in many of these countries, such markets for hedging instruments (forwards, futures, swaps, options) developed only gradually, and with a lag to spot market development. Central banks actively promoted the development of FX derivatives markets e.g. by removing impediments and allowing non-resident access. Some central banks, e.g. in Israel and Uruguay, stimulated the derivatives market by actively participating in the market by issuing own instruments⁴.

The presence of complementary financial markets is an important prerequisite for deep and liquid FX derivatives markets. This relates firstly to liquid and efficient short-term money and government Treasury bill markets, which are necessary for pricing (arbitrage via covered-interest-parity). The absence of such markets hinders derivatives markets development. Secondly, also longer term government bond markets, but also corporate bond and stock markets are important for such purposes, and should be developed in tandem.

The following figure gives a cross-country overview of the ingredients of a floating FX regime, among them the status of development of complementary financial markets.

³ An important source of information is the "BIS Triennial Central Bank Survey of foreign exchange and derivatives market activity". The latest survey from 2015, which is based on data from 2013 can be obtained here: <http://www.bis.org/publ/rpfx13.htm>.

⁴ See IMF (2007): Moving to Greater Exchange Rate Flexibility. Operational Aspects Based on Lessons from Detailed Country Experiences. Occasional Paper 256.

Figure 5: Ingredients of a floating FX regime – Selected country overview

	Orderly Exits			Exits under Pressure		
	Chile (1984–99)	Israel (1985–2005)	Poland (1990–2000)	Brazil (1999)	Czech Rep. (1996–97)	Uruguay (2002)
Ingredients of a Floating Regime						
(1) FX market development						
Spot markets	√	√	√	√	√	√
Derivative markets/hedging instruments	√	√	√ ²	√ (futures)	√ ²	X
Complementary markets						
Interbank money market	√	√ ³	√	√	√	X
Securities market	√	√ ³	√	√	√	√ ⁴
(2) FX risk management capacity	√	√	√	X ⁵	√	X
(3) Alternative monetary policy framework	√	√	√	X	X	X
Monetary policy implementation capacity	√	√	√	√	√	X
(4) Intervention strategy for a floating regime	With the float	√	With the float	With the float	√	With the float
Overall preparedness	Well prepared	Well prepared	Well prepared	Reasonably well prepared	Reasonably well prepared	Not well prepared
<i>Memo: Capital Account Liberalization</i>						
Short-term capital inflows liberalized	√ ⁶	√	√ ⁷	√ ⁶	√ ⁷	√
Capital outflows liberalized	√ ⁶	√	√ ⁷	√	√ ⁷	√
Derivative transactions liberalized	√	√	√ ⁷	√	√ ⁷	√

Source: Detailed case studies.

Note: FX = foreign exchange.

¹The years in parentheses refer to the period of transition to a full float.

²Major boom one year before the float.

³Lagged behind compared to the foreign exchange markets.

⁴For maturities less than 270 days.

⁵The prudential framework was not in place to control the overall risk exposure of banks, with identified shortcomings mainly regarding the prudential regulation of banks' exposure to FX risk. Corporates in general (and banks) were making active use of the futures markets to hedge their exposures or to take speculative positions. Market participants were not accustomed to assessing, as a matter of routine, the FX risks posed by regular market volatility.

⁶For Chile, all controls were removed shortly before or with the float. For Brazil, controls were liberalized gradually during the 1990s (inflow controls of 1993–96 liberalized by 1999), with further liberalization for nonresident investments after the float.

⁷In the Czech Republic, most inflows and outflows had been liberalized by 1997, but certain inflow transactions (including financial derivatives) were liberalized in early 1999, following a transition period to phase out the remaining controls under the agreement with the Organization for Economic Cooperation and Development (OECD), with full liberalization taking place in 2002. Similarly in Poland, full liberalization of all capital account transactions took place in 2002, until which time certain transactions (including selective derivatives operations and short-term portfolio and deposit transactions) had remained controlled.

Source: IMF (2007)

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