Elaine Mabiletsa

The risk of currency volatility and how to protect your business against them

Introduction

- The reality of the business world today: **Globalisation**
  - Business growth (opportunity / challenge)
  - Competition
  - Regulations
  - Human and financial capital
  - Technology
  - Foreign exchange rate risk

- Result : **Financial risk**

Importance of Risk Management

- According to a recent study, many businesses fail to fully protect themselves against the most significant financial risks they face.

- It has been found in 2016 in the USA that only **55%** of firms with exposure to currency risk actively manage this risk through the use of financial hedges.

- The decrease in usage of financial risk management tools has emerged during a period of heightened volatility in global markets, especially in currencies.

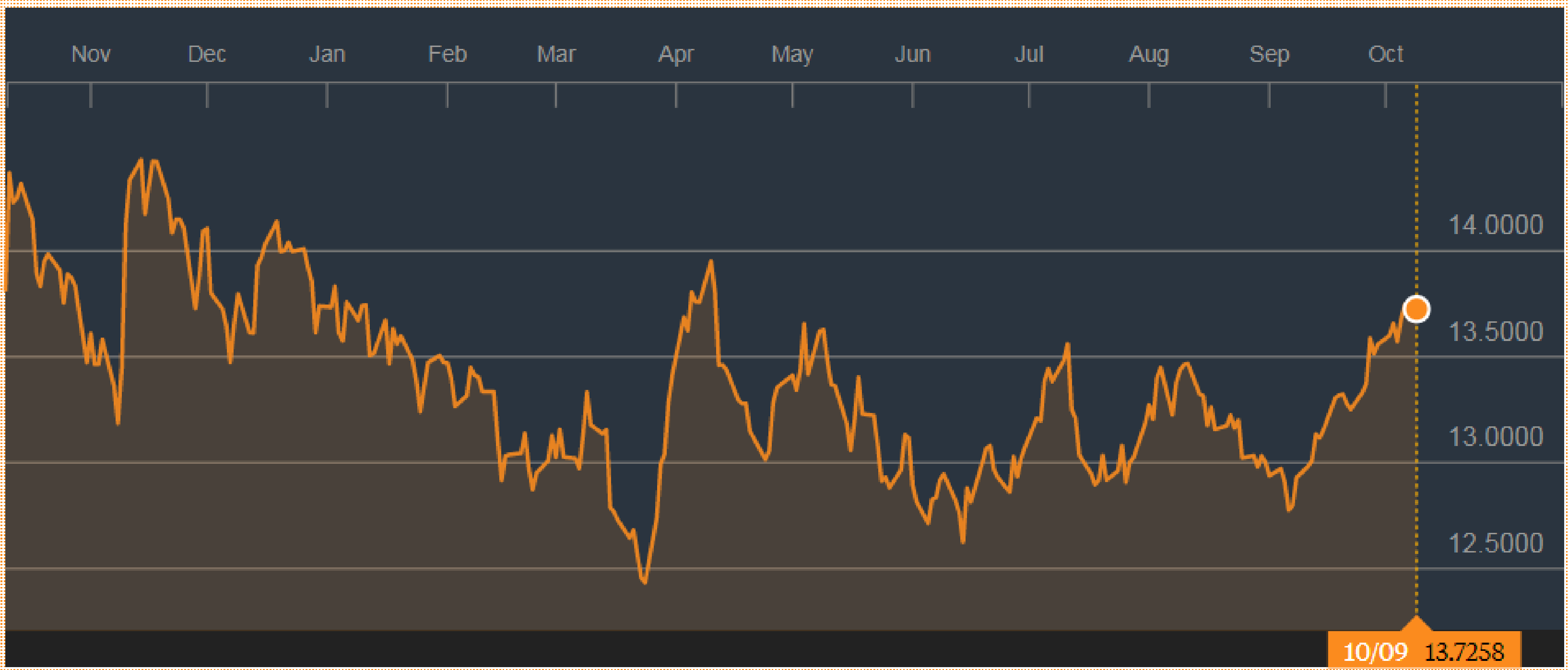
- This can result in the business being exposed to enormous downside risk as currencies fluctuate, be it from singular ‘shock’ events or longer-term trends.

To hedge or not to hedge

- Time to not hedge – when ZAR is strengthening relative to the other country's currency
- Time to hedge – when ZAR is weakening relative to other country's currency
- Where ZAR has been trending…

1 Month Chart - USDZAR

1 Year Chart USDZAR



5 Year Chart USDZAR

Factors affecting Exchange rates

- Inflation Rates
- Interest Rates
- Country’s Current Account
- Government Debt
- Terms of Trade / Balance of Payments
- Political (in)Stability & Performance
- Recession
- Speculation

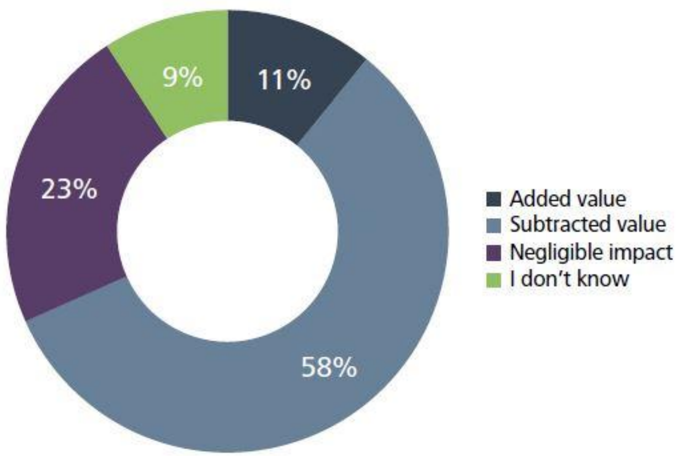
Ways in which derivatives are important to a company's business and investment decisions

Hedging exposures in international markets to maintain and enhance our competitiveness	42%
Reducing financing costs and managing the cost of capital that my firm borrows to invest in our business	38%
Managing exposures (to currencies, commodities, credit, etc) so that my firm can maintain and improve pricing, operating expenses and returns	67%
Hedging risks of new activities and investments so my firm can effectively invest for growth	28%

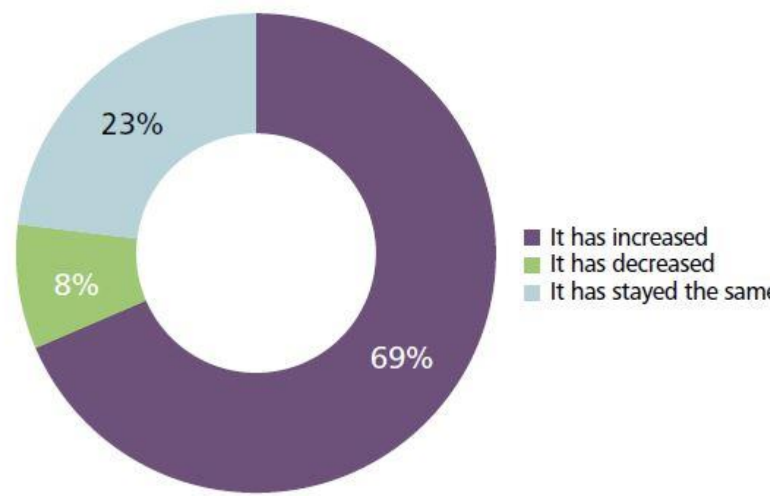
ISDA Insight 2015: survey of 376 respondents

EMPEA: Emerging Markets Private Equity Association with Derivatives

What impact have exchange rate movements had on your Market Private Equity investments?



How does Emerging Market currency risk compare to 5 years ago?



- 75% rank currency risk as important
- 60% say exchange rate movements have subtracted value from their EM investments

EMPEA Currency Risk Management Survey 2016 N=146 Industry Professionals

Case Study : BMW

Hedging Benefits

- Use of derivatives in corporate risk management can contribute to the creation of company's **market value** and **shareholder wealth**.

- The purpose of risk management activities is to ensure the **best possible combination of return and certainty of achieving that return** with respect to the company's resources and risk preferences.

- Deviation from the planned revenues or cash flows may weaken company's financial state and lead to harder access to external capital at higher rates.

- **Reducing the volatility of cash flows**, companies can **decrease costs of financial distress** and obtain internal **funds for financing new investments**, as well as **reduce the dependence on costly external capital**.

Hedging Benefits

- By reducing the volatility in the income stream, hedging can improve firms' capital-raising capabilities.
- Lower cash-flow volatility can increase firms' creditworthiness and, hence, their debt capacity.
- Better creditworthiness results in lower interest rates and fewer investment restrictions attached to debt obligations. This leads to higher investment.
- Firms that hedge tend to use more external financing, and have more sophisticated balance-sheet management. Hedgers make greater use of bank loans and bonds to finance their investments.
- Hedgers are better at optimizing their capital structure to achieve higher profit. This is consistent with the finding that increased debt capacity has a positive impact on the value of the hedging firms.
- Hedgers hold less cash as a share of total assets than the average non-hedger. It could also imply that hedgers actively manage their balance sheets to finance profitable investment opportunities.

Hedging

- Large companies are dominant users of derivatives - **company size is the primary characteristic distinguishing users from non-users of derivatives**.
- Excluding financial firms the **use of derivatives is higher among primary product companies and manufacturers than among companies in the service industry**. However, the intensity of use of derivatives by service companies is increasing significantly faster than for other companies.
- **Leverage**, **firm size** and **liquidity** are the most important factors influencing the likelihood that a company will use derivatives.
- Companies, regardless of size or economic sector, mainly use derivatives for hedging purposes **striving to achieve lower earnings volatility**. The use of derivatives for speculative and arbitrage purposes is higher for large companies.
- Other major motives for derivative usage as hedging are **locking in profits and reducing costs of funds**.

Hedging statistics

- While 69% of large companies (revenues of $5 - $20bn) hedged their FX risks in 2015, just 39% of small companies did so (revenues of $500 million to $1 billion).
- Half of organizations that have currency risk are hedging their exposure; this is low given the extreme volatility around the currencies to which the companies have exposure. The majority of companies that are hedging foreign exchange (FX) risk are using both balance sheet and cash flow hedges.
- Hedging programs require sophisticated teams and dedicated resources, which just isn't an option for many smaller firms. Larger firms are naturally better positioned to plan and execute a robust internal hedging practice
- The survey found that foreign exchange derivatives are the most widely used instruments (88% of the sample but 96% for financial services companies), followed by interest rate derivatives (83%) and commodity derivatives

** International Swaps & Derivatives Association INC. (ISDA): Worlds 500 Largest Companies

Evidence suggests that "firms use derivatives in order to reduce their expected costs of financial distress and enhance their market values". The latter reason means that companies use derivatives in shareholders' interest.

Radomír Císař, Václav Dufala

Currency Derivatives

JSE Currency Derivatives

- Futures
  - Currency futures are contracts that allow buyers and sellers of currency to commit to an exchange rate today, for a future value date

- Options
  - A currency option is an agreement that gives investors the right, but not the obligation, to buy or sell a Currency Futures Contract at a future date and a predetermined price, known as the strike rate.

Advantages of Futures

- Flexible dynamic hedge
- Cost is known and deductible
- Margin lower than collateral
- Transparent and regulated trade
- Can exit position with best priced counterparty at any time without penalties
- No obligation to deliver Forex (unless explicitly required)
- No SARB approval required
- No firm and ascertainable commitment (paperwork) required to enter/exit a trade
- Have a daily view on profit/loss of the hedge

Uses of Currency Derivatives

- **Hedge**
  - Reduce risk by protecting an existing portfolio against possible adverse currency movements.
  - Hedgers have a real interest in the underlying currency and use futures as a way of preserving their performance.

- **Invest**
  - Enhance the long-term performance of a portfolio of assets.

- **Speculate**
  - Enhance risk with the aim to make a profit on short-term movements in prices.
  - Speculators enter into currency futures contracts in order to take a view on the movement of the underlying exchange rate, without having the need to buy the underlying currency

Qualifying Clients

- The following categories of clients are permitted to trade and hold positions in Currency Derivatives:
  - A South African individual with no limits applicable
  - A South African corporate entity with no limits applicable
  - A non-resident individual or non-resident corporate entity with no limits applicable
  - A resident financial service provider and collective investment scheme, subject to their foreign portfolio allowance
  - A resident pension fund organisation, subject to their foreign portfolio allowance
  - A resident long-term or short-term insurer, subject to their foreign portfolio allowance
  - A hedge fund may trade in an unlimited capacity provided that they are not regulated under investment managers' rules

Products Offered

- **Currency Futures** – A derivative contract that allows participants to take a view on the movement of the exchange rate as well as hedge against currency risk.
- **Currency Options** – A derivative contract that grants the purchaser the right but not the obligation to trade a Currency Futures contract at a predetermined date in the future (IMM date) at a prearranged price (strike), regardless of where the underlying market is trading.
- **Any Day Futures and Options** – A currency futures or options contract that gives the investor the ability to hedge to a specific date other than the standard IMM dates.
- **Can Do Options** – Can Do Options represent an innovative, extremely flexible method of investing in Exchange Traded Derivative Contracts. In essence, these instruments enable investors to select a basket of Futures and Option contracts while negotiating terms such as the expiry date.
- **Quanto Futures** – A Currency Future that mirrors the movement of a foreign referenced underlying.
- **African Currency Futures** – A derivative contract that allows participants to take a view on the movement of an African Country's exchange rate as well as hedge against African currency risk.

Listed Currency Futures Contracts

STANDARD CONTRACTS

- US Dollar/Rand
- Euro/Rand
- Pound/Rand
- Australian Dollar/Rand
- Japanese Yen/Rand
- Canadian Dollar/Rand
- Swiss Franc/Rand
- Chinese Renminbi/Rand
- New Zealand Dollar/Rand
- Turkish Lira/Rand
- Danish Krone/Rand
- Hong Kong Dollar / Rand

AFRICAN CURRENCIES:

- Zambian Kwacha/Rand
- Kenyan Shilling/Rand
- Botswana Pula/Rand

CURRENCY INDEX:

- Rand Index (RAIN)

QUANTO CONTRACTS

- Euro/Dollar Quanto
- Pound/Dollar Quanto

Live Currency Futures Pricing – JSE website

Johannesburg Stock Exchange

COMPANIES & ISSUER REGULATION | MEMBERSHIP | MARKETS & REGULATION | POST TRADE SERVICES | PRODUCT & SERVICES

CONTRACT	BID QTY	BID	OFFER	OFFER QTY	LAST TRADED	HIGH	LOW	VOLUME	OPEN INTEREST
14MAR16 QUANTO € / $	250	1,0886	1,0908	250	1,0965	0,0000	0,0000	0	2
13JUN16 QUANTO € / $	250	1,0920	1,0950	250	1,0997	0,0000	0,0000	0	0
19SEP16 QUANTO € / $	250	1,0971	1,1014	250	1,1038	0,0000	0,0000	0	0
14MAR16 AU$ / R	500	11,5078	11,5218	500	11,5205	11,5205	11,5154	475	14705
13JUN16 AU$ / R	250	11,6627	11,6911	250	11,6436	0,0000	0,0000	0	3067
19SEP16 AU$ / R	475	11,8579	11,8778	650	11,8888	11,8888	11,8888	25	875
19DEC16 AU$ / R	500	12,0432	12,0642	500	12,0099	0,0000	0,0000	0	152
14MAR16 CAD/ R	100	11,8736	11,8899	100	11,8102	0,0000	0,0000	0	0
13JUN16 CAD/ R	100	12,0907	12,1094	100	12,0251	0,0000	0,0000	0	0
14MAR16 CNH / R	100	2,4529	2,4607	100	2,4400	0,0000	0,0000	0	0
13JUN16 CNH / R	100	2,4760	2,4852	100	2,4602	0,0000	0,0000	0	22550
14MAR16 DKK / R	100	2,3480	2,3610	100	2,3511	0,0000	0,0000	0	0
13JUN16 DKK / R	100	2,3985	2,4115	100	2,4011	0,0000	0,0000	0	0
14MAR16 € / R	460	17,5538	17,5730	500	17,6067	17,6900	17,6067	443	58989
13JUN16 € / R	495	17,9277	17,9486	750	18,0506	18,0506	18,0506	5	42280
19SEP16 € / R	500	18,3584	18,3826	500	18,3114	0,0000	0,0000	0	9138
14MAR16 CHF / R	100	16,0896	16,1216	100	16,0339	0,0000	0,0000	0	6657
13JUN16 CHF / R	100	16,4583	16,4948	100	16,4003	0,0000	0,0000	0	0
14MAR16 £ / R	200	22,3224	22,3423	850	22,3450	22,4775	22,3420	914	56147
13JUN16 £ / R	385	22,7371	22,7606	650	22,7600	22,8102	22,7571	215	5164

Margining

- Each trade is matched daily by JSE Clear, i.e. the exchange ensures that there is a buyer and a seller to each contract traded.
- The JSE's clearinghouse JSE Clear becomes the counterparty to each trade once each transaction has been matched and confirmed.
- The clearinghouse therefore ensures settlement takes place on each trade.
- To protect itself from non-performance, JSE Clear employs a process known as margining. This mechanism is two-fold:
  - Initial Margin
  - Variation Margin

Zero-sum game:
For every winner there is an equal loser

1 USDZAR Contract = $1,000

Therefore 10 contracts = $10,000

Client A	Exchange	Client B
Buys 10 contracts @ R13.20		Sells 10 contracts @ R13.20
	Market closes @ R13.30	
Receive 10c per $		Lose 10c per $
	Market closes @ R13.50	
Receive 20c per $		Lose 20c per $
	Market closes @ R13.30	
Lose 20c per $		Receive 20c per $
	Close position @ R14.00	
Receive 70c per $		Lose 70c per $
Nett up: 80c (10 000x80c=R8 000)		**Nett down: 80c (10 000x80c=R8 000)**

Disclaimer

- This presentation is intended to provide general information regarding the Currency derivatives market, and is not intended to, nor does it, constitute investment or other professional or financial product advice and is not intended to be used as the basis for making an investment decision. It is prudent to consult professional advisers before making any investment decision or taking any action which might affect your personal finances or business.
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