

VOLUME 8 NUMBER 4 Nov 2016

**ISSN 2076-9202 (Print)
ISSN 2218-046X (Online)**

International Journal of Information, Business and Management



ELITE HALL PUBLISHING HOUSE

International Journal of Information, Business and Management

ABOUT JOURNAL

The International Journal of Information, Business and Management (IJIBM) was first published in 2009, and is published 4 issues per year. IJIBM is indexed and abstracted in **EBSCO, DOAJ, Ulrich's Periodicals Directory, ProQuest (ABI/INFORM Global) , ZORA (Zurich Open Repository and Archive), IndexCopernicus, JournalSeek, New Jour, getCITED, Directory of Research Journals Indexing, Open J-Gate, Universal Impact Factor, CiteFactor, ResearchBib, EBSCO Open Access Journals, Scientific Indexing Service, InnoSpace - SJIF Scientific Journal Impact Factor, The Index of Information Systems Journals, National Central Library Taiwan, National Library of Australia , National Science Library (Chinese Academy of Sciences)**. Since 2013, the IJIBM has been included into the EBSCO (Business Source Corporate Plus database), one of the largest full-text databases around the world. Since 2013, the IJIBM has been included into the ProQuest (ABI/INFORM Global) list. Since 2014, the IJIBM has been included into the National Science Library (Chinese Academy of Sciences) the top of the academic halls of China.

IJIBM is an international journal that brings together research papers on all aspects of Information, Business and Management in all areas. The journal focuses on research that stems from academic and industrial need and can guide the activities of managers, consultants, software developers and researchers. It publishes accessible articles on research and industrial applications, new techniques and development trends.

IJIBM serves the academic and professional purposes for those such as scientists, professionals, educators, social workers and managers. It provides new methodology, techniques, models and practical applications in various areas.

CONTENTS

- 1 PUBLISHER, EDITOR IN CHIEF, MANAGING EDITOR AND EDITORIAL BOARD**
- 2 EXCHANGE RATE EXPOSURE AND FIRM-LEVEL PERFORMANCES: THE CASE FOR MACEDONIA**
GLIGOR BISHEV, TATJANA BOSHKOV
- 3 ASSESSING FINANCIAL MOTIVATION AND ITS INFLUENCE ON PERFORMANCE OF TEACHERS IN GOVERNMENT SENIOR HIGH SCHOOLS IN GHANA**
ABUBAKARI ZAKARI, NARH OPATA CHRISTIAN, ADWOA BENEWAA BREFO-MANUH, MACLEAN MARIAN, BOATENG THEKLA
- 4 ARE EXCHANGE RATE EXPOSURE AND HEDGING IMPORTANT FOR FIRM PERFORMANCES? EVIDENCE FOR MACEDONIAN SMES**
GLIGOR BISHEV, TATJANA BOSHKOV
- 5 CAN MICRO FINANCING INCREASE ITS ROLE IN SUPPORT OF ACCOMMODATION INVESTMENTS OF FAMILY OWNED TOURIST ENTERPRISES?**
ZORAN TEMELKOV, DEJAN METODIJESK
- 6 FACTORS AFFECTING DEPOSITORS' SATISFACTION TOWARD THE SERVICES OF PRIVATE COMMERCIAL BANKS IN BANGLADESH: A STUDY ON DHAKA AND KHULNA CITY**
S. M. AKTERUJJAMAN
- 7 FEDERATING SCHOOL WEBSITES: DEVELOPING A FEDERATION PLATFORM FOR MULTIPLE WEBSITES WITH COMMONALITIES**
JUNGWOO LEE, JUN-GI PARK
- 8 THE CONCEPTUALIZATION OF VARIOUS ASPECTS OF INNOVATION AND ITS RELEVANCE WITH SMES**
MOHAMMAD DAUD ALI, SYED IMAD SHAH
- 9 THE EVOLUTION OF REGULATORY AND SUPERVISORY FRAMEWORK OF ISLAMIC BANKS: A GROWING GLOBAL DIVERGENCE**
ASAD KHAN
- 10 CHALLENGES AND OPPORTUNITIES OF RURAL MARKETING IN GHANA**
OWUSU ALFRED, ERIC EDWIN OWUSU
- 11 INFLUENCE OF SELF-EFFICACY TO STUDENT ENTREPRENEURIAL-INTENTION WITH STUDENT BACKGROUND AS A MODERATING VARIABLE: CASE STUDY IN INDONESIA**
SINGGIH SANTOSO
- 12 EMOTIONAL INTELLIGENCE: A COMPARISON OF CHINESE AND AMERICAN ACCOUNTING**

MAJORS

THOMAS M. MARGAVIO, GEANIE W. MARGAVIO, DUANE R. MOSES, MICHAEL A. HIGNITE

13 EVALUATING ADVERTISEMENT: THE ROLE OF CUSTOMER'S DECISION-MAKING STYLE, INNOVATIVENESS, AND IDEOLOGY

FATEMEH SHATERI, SHAHNAZ NAYEBZADEH, ABOLFAZL DAVOUDI ROKNABADI

14 A NEWLY DEVELOPED EGYPTIAN QUESTIONNAIRE OF NURSING WORKPLACE DEVIANCE: CONSTRUCT VALIDITY AND RELIABILITY

NAGAH ABD EL-FATTAH MOHAMED ALY, SAFAA MOUSTAFA EL-SHANAWANY

15 INVESTIGATING THE RELATIONSHIP BETWEEN GENDER AND JOB SATISFACTION AMONG THE EMPLOYEES OF MELLI, MELLAT, AND SADERAT BANKS IN YAZD TOWNSHIP

FATEMEH SHATERI, HOSSEIN AMINIKHAH, ELHAM AKHIRI ARDAKANI, MEHDI GHANEI ARDAKANI

16 NURSES' ORGANIZATIONAL TRUST: ITS IMPACTS ON NURSES' ATTITUDES TOWARDS CHANGE IN CRITICAL CARE AND TOXICOLOGY UNITS

NAGAH ABD EL-FATTAH MOHAMED ALY, SAFAA MOUSTAFA EL-SHANAWANY

17 BUSINESS RESOURCES AND CAPABILITIES AS DRIVERS OF ENVIRONMENTAL STRATEGY: A CASE STUDY OF THE NIGERIAN TOURISM DEVELOPMENT CORPORATION (NTDC)

B.E.A. OGHOJAFOR, O.A. OGUNKOYA

18 SMOKING TREND AMONG THE STUDENTS OF SARGODHA UNIVERSITY

AROOSA JANNAT

19 ANALYSIS OF FOREIGN DIRECT INVESTMENT IN INDIA

TITTO VARGHESE

20 AN INVESTIGATION OF FACTORS INFLUENCING THE ADOPTION OF ELECTRONIC MANAGEMENT BASED ON THE THEORY OF REASONED ACTION (TRA): A CASE STUDY IN THE UNIVERSITY OF TECHNOLOGY / IRAQ

KHALID NASER ALZUBI, FAIROUZ MOSLEH ALDHMOUR, HAYDIR BASIL ALI ALATTRAQCHI

21 THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON THE FAIR VALUE

BADIR MOHAMMED ALWAN, ABEER IHASAN SAMARA

22 AN EVALUATION OF THE POLICIES INSTITUTED BY THE GOVERNMENT OF ZIMBABWE IN PROMOTING SURVIVAL AND GROWTH OF SMES: THE CASE OF GLENVIEW AREA 8 SMES

NYAMWANZA L., PAKETH L., MAKAZA F., MOYO N.

23 MANAGERIAL FUNCTIONS AND JOB SATISFACTION WITHIN AN ORGANIZATION

RADHIKA KAPUR

Publisher: Elite Hall Publishing House**Editor in Chief:**

Dr. Muzaffar Ahmed (Bangladesh)
E-mail: muzaahme1@gmail.com

Managing Editor:

Dr. Jia Chi Tsou
Associate Professor, Department of Business Administration
China University of Technology, Taiwan
E-mail: jtsou.tw@yahoo.com.tw

Editorial Board:

Dr. Claudio De Stefano
Professor, Department of Computer Science
University of Cassino, Italy.
E-mail: destefano@unicas.it

Prof. Paolo Pietro Biancone
Professor of Financial Accounting, Faculty of Management
and Economics
University of Turin, Italy
Email: biancone@econ.unito.it

Dr. Michael A. Hignite, Ph.D.
Professor, Department of Computer Information Systems,
College of Business
Missouri State University, USA
Email: mikehignite@missouristateuniversity.com

Dr. Seema Varshney
Assistant Professor, Waljat college of applied sciences
Muscat, Oman
E-mail: smvarster@gmail.com

Dr. Morteza Rasti Barzoki
Assistant Professor, Department of Industrial Engineering
Isfahan University of Technology, Iran
E-mail: rasti@cc.iut.ac.ir

Mr. Mohsen Fathollah Bayati
Department of Industrial Engineering
Iran University of Science and Technology, Iran
E-mail: mfbayati@ind.iut.ac.ir

Dr. Edgardo Palza Vargas
Telfer School of Management
University of Ottawa, Canada
Email: edgardo.palza-vargas.1@ens.etsmtl.ca

Dr. Solomon Markos
Assistant Professor, Department of Management
Arbaminch University, Ethiopia
Email: solomonmarkos5@yahoo.com

Mr. Olu Ojo
Lecturer, Department of Business Administration
Osun State University, Nigeria
Email: oluojoe@yahoo.com

Dr. Mohammed-Aminu Sanda
Visiting Research Fellow, Lulea University of Technology,
Sweden
Senior Lecturer, Department of Organization and Human
Resource Management, University of Ghana, Ghana
Email: masanda@ug.edu.gh

Dr. Khalid Zaman
Assistant Professor, Department of Management Sciences
COMSATS Institute of Information Technology, Pakistan
Email: khalidzaman@ciit.net.pk

Dr. Kartinah Ayupp
Deputy Dean, Economics and Business
Universiti Malaysia Sarawak, Malaysia
Email: akartinah@feb.unimas.my

Dr. Malyadri. Pacha
Principal, Government Degree College
Affiliated to Osmania University, India
Email: drpm16@yahoo.co.in

Dr. Arif Anjum
Assistant Professor, M.S.G. Arts, Science & Commerce
College, Malegaon, India
Managing Editor, International Journal of Management
Studies
Email: infoijcms@gmail.com

Mr. Andrew McCalister
Global Research Awardee, Royal Academy of Engineering,
University of Cambridge, UK
Email: andrewmccalister@gmail.com

Dr. Mohsin Shaikh
Professor & Head, Department of Management Studies
SKN College of Engineering, Pune, India
Email: skmohs@yahoo.co.in

Dr. M. Razaullah Khan
Associate Professor, Department of Commerce &
Management Science
Maulana Azad College, Aurangabad, India
Email: drzakhan@sify.com

Mr. Kai Pan
Research Assistant & Ph.D. Candidate, Department of
Software and Information Systems
University of North Carolina (UNC Charlotte), USA
Email: kpan@uncc.edu

Dr. Sundar Kumararaj
Associate Professor, Commerce Wing, Directorate of
Distance Education,
Annamalai University, Annamalai Nagar, Tamil Nadu, India
E-Mail: commercesundar@gmail.com

Dr. Mohammad Alawin
Associate Professor, Business Economics Department
The University of Jordan, Amman, Jordan
E-mail: m.alawin@ju.edu.jo

Mr. Dinh Tran Ngoc Huy
Visiting lecturer, PhD candidate, Banking University HCMC,
Vietnam
Email: dtnhuy2010@gmail.com

Web: <http://ijibm.elitehall.com>

ISSN 2076-9202 (Print)

ISSN 2218-046X (Online)

ARE EXCHANGE RATE EXPOSURE AND HEDGING IMPORTANT FOR FIRM PERFORMANCES? EVIDENCE FOR MACEDONIAN SMES

Gligor BISHEV^{*)}

Tatjana BOSHKOV^{*)}

Abstract

Globalization brings benefits and threats for the sector of small and medium enterprises, because of their role to export which is from big importance for small and open economies. Recommendations are related on building relationships with financial institutions, especially banks in order to facilitate the financing of small and medium enterprises (SMEs). In this context, it is useful to identify which are exporters and those who seek to provide value in areas like managing foreign exchange risk and predict currency needs. Most investors will be familiar with the concept of currency exposure, with constantly changing exchange rates affecting the cost of investing in international securities. These same issues also affect companies that operate internationally. So what effect do currency fluctuations have on company profits, and what are they doing to insulate themselves? Firms can choose to manage their currency exposure through business practices. Having a truly international company can help with this as, theoretically, losses made when one currency falls will be recovered when another rises. Where contracts are concerned business can also set up clauses that reduce this exposure. In many cases this comes in the form of an agreement to protect the client and the company should exchange movements exceed the agreed-upon level. Dealing with the currency exposure is all about managing risk, as fluctuations are by very nature unpredictable. In this paper we examine this question. We surveyed financial and general managers of companies in Macedonia in order to examine their views and practices about this important questions.

Keywords: Exchange rate exposure; Hedging, SME; Macedonia, risk.

INTRODUCTION

It is widely acknowledged that in an open economy, the exchange rate constitutes the most important price. The existence of exchange rate exposure can be very painful as examples from several emerging

^{*)} Executive Director and Chairman of the Board, Sparkasse Bank, Macedonia.E-mail: Gligor.Bishev@sparkasse.mk

^{*)} Faculty of Tourism and Business Logistics,University “Goce Delcev” , Stip
E-mail: tatjana.boskov@ugd.edu.mk; tatjana.boskov@gmail.com

economies have shown.

Although the rapid growth in international investments reflects the benefits of geographic diversification, currency risk can counteract some of these advantages (Edwards, 1998) . Since foreign exchange rates can have a significant impact on returns, investors may be interested in hedging this risk where possible and appropriate. Investments in overseas instruments, such as stocks and bonds, can generate substantial returns and provide a greater degree of portfolio diversification, but they introduce an added risk, that of exchange rates. While hedging instruments such as currency futures, forwards and options have always been available, their relative complexity has hindered widespread adoption by the average investor.

This paper was motivated by the increasing role of foreign exchange debt in financing small and medium-sized enterprises. FX debt, if not hedged, exposes firms to depreciation, which may result in losses for the banking sector as well. There are other channels through which the credit risk of corporations is also influenced by exchange rate changes. Financial crisis and exchange rate exposure literature is reviewed to highlight the significance of this issue.

We will first present the theoretical foundation, then we will present the research methodology, and finally we will discuss the findings.

THEORETICAL LITERATURE REVIEW

How does the exchange rate regime affect firms' incentives to hedge their exposure to currency risk? This question has been at the center of the debate over optimal exchange rate regimes in emerging markets since the financial crises of the 1990s exposed the perils of unhedged foreign currency debt. Yet there is no clear consensus among economists on whether the type (or degree of flexibility) of the exchange rate regime affects the corporate sector's incentives to take on foreign currency denominated liabilities or to insure against depreciation risk.

Two basic views exist in this respect. On the one hand, several authors have argued that pegged exchange rate regimes biases corporate borrowing towards foreign currency, due to an implicit exchange rate guarantee given by the government (Mishkin,1996; Goldstein and Turner, 2004). Under fixed or pegged regimes, the central bank keeps currency volatility within a pre-announced range, effectively underwriting currency risk (Dooley,2000). Thus, firms borrow in dollars to benefit from the lower ex ante dollar interest rates, and expect the government to insure them from any potential loss in the event of a large devaluation. A second variant of this argument suggests that because of limited exchange rate volatility under fixed or tightly managed exchange rate regimes, borrowers appear to consider a steep devaluation a low-probability event, and therefore neglect or underestimate the exchange rate risk associated with borrowing in foreign currency. The fact that fixed/pegged exchange rates have played a role in every recent financial crisis since 1994, and that firms relied extensively on unhedged foreign currency financing in the years leading up to the crisis, is often used as strong evidence for these views.

On the other hand, Eichengreen and Hausmann (1999) and Eichengreen, Hausmann, and Panizza (2005) dispute this view. The authors suggest that at the root of currency mismatches lies the fundamental inability of emerging markets to borrow abroad in their own currency. Inevitably, this leads to an

accumulation of foreign-currency denominated debt which firms are simply unable to hedge, even if they have the foresight or prudence to match the currency structure of their assets and liabilities. In addition, McKinnon and Pill (1999) argue that adopting a floating rate regime will actually exacerbate currency mismatches. Because the domestic interest rate risk premium is a direct function of the stability of the currency, exchange rate volatility associated with floating rates will increase domestic interest rates (and thus the incentives to borrow in foreign currency) and make financial hedging more expensive.

HEDGING AS A TOOL FOR UPSTREAMING THE COMPANIES

Commodity price volatility has always been with us and is the single biggest variable in forecasting EBIT for non-integrated independent exploration and production companies (Aabo, 2003).

The use of commodity derivatives can mitigate or remove oil or gas price uncertainty as one of the fundamental industry variables, a variable which in turn directly impacts liquidity, (the poor management of which is the biggest predictor of a small cap's impending mortality).

If used incorrectly, without a clear understanding of and regard for the interaction between the derivative product and its specific characteristics and the underlying reserve, production, timing and fiscal risks, derivatives can multiply losses in the case of reservoir-related production, under-performance.

To hedge or not to hedge?

While currency movements can affect a portfolio, sometimes those fluctuations can be beneficial to investors. In such cases, currency hedging would actually forego any profits that could be obtained from favorable movements in the exchange rate. So when does it actually make sense to hedge? It is important for investors to assess several factors when deciding whether or not to hedge currency (Keloharju and Niskanen, 2001).

- **Investor Outlook:** If an investor believes that a foreign currency will appreciate relative to the Canadian dollar, than investing in unhedged securities is probably more suitable. In this case, if the outlook proved to be correct, the investor would receive both the returns on the underlying security and the gains on the currency. Alternatively, if an investor believes that foreign currency will depreciate relative to the Canadian dollar, then currency hedging may be a viable solution to mitigate losses.
- **Time Horizon:** In the short run, currencies are more prone to diverging from equilibrium than over the long term. Given the higher currency volatility over shorter or medium horizons, hedging may help to eliminate noise from constant changes. Hedging currency may allow investors to attain their goals if they value stability and are seeking to reduce short-term downside risk.
- **Cost:** Currency forwards that are especially liquid, like the U.S. dollar, are relatively inexpensive to hedge. However, for underlying currencies that are less liquid, such as those for emerging markets, hedging foreign exchange exposure may become more costly and less efficient. These higher costs can potentially diminish returns over time. The costs associated with hedging currency may include bid/ask spreads, carrying costs, and margin. Investors should evaluate whether the cost of a hedge outweighs the currency's potential downside risk.
- **Potential Cash Flow Mismatches:** Hedge positions may produce

cash flows independent of the assets being hedged. While the change in value of hedged assets attributable to exchange rates should approximately offset the change in the value of the hedge itself, the hedge position may create interim negative (or positive) cash flows as currency derivatives positions are rolled forward. The situation becomes somewhat more risky for portfolios holding illiquid hedged assets. In such a case, a losing hedge position will produce negative cash flows that may not be im

Mitchell and Stafford (2000) lay out the three essential step to setting up hedging strategy.

Step 1: Find a bank that provides the hedging tools you need.

Step 2: Figure out what kind of exposure you have. (If a significant percentage of your revenue comes from the euro, you're highly exposed to volatility.)

Step 3: Enlist someone—an expert or consultant in this area—that can offer unbiased information.

Regarding these three steps maybe the third one is the most important part. A misquote of an interbank rate can double hedge costs. Any sort of disagreement in implied volatility can double options premiums. It's essential to have some sort of a third party that has access to interbank pricing, who can help to negotiate terms with the bank. There's another reason to consider hedging, too. It may help in beating out the competitors. When companies are able to take their exposure off the books and protect themselves against it, it can be a big boon to their efforts. It's a huge competitive advantage for companies because many small businesses are just not that familiar with protecting themselves in this way.

Snapshot of exchange rate exposure for Macedonian companies

Refinancing risk is significant for Macedonia. It will need to repay large Eurobonds maturing in 2013 and 2015, as well as the PLL purchase (in 2014–16) and the bank loan guaranteed by the World Bank PBG (in 2016) . Market volatility has been high since the onset of the global crisis, due to external rather than domestic factors. This was evident in 2009, when the government issued a 3½-year Eurobond at a yield of 9⅞ percent, more than double the 4⅝ percent yield of the 10- year issuance in 2005, and in 2010 when it canceled a planned Eurobond issuance after market rates spiked in the run-up to the Greek program. In addition, domestic debt features a very short average maturity of just 6 months, and hence the need to roll over existing debt on average 2 times per year.

Macedonia's exposure to currency risk could gradually be reduced by increasing domestic non FX-indexed denar issuance. Currency exposure is considerable: all external debt is in FX, and almost half of outstanding domestic government debt is FX-linked (Table 1). Taken together, almost 90 percent of general government debt is hence denominated in or linked to foreign currency. Currency risk—defined as the (high) exposure multiplied by the (low) probability of a shock—may not appear to be high in light of the stability of the peg over the past 15 years. However, reducing it would add to policy flexibility in the event of unforeseen shocks in the future. Gradually increasing the share of domestic denar-denominated, non FX-linked debt would be a prudent strategy in this context, together with increasing the share of domestic debt in fiscal financing. These actions would also bring other benefits,

including developing the domestic currency yield curve, improving the monetary policy transmission mechanism, and in general promoting greater use of denars in financial transactions.

Table 1. Percentage of foreign currency debt in domestic debt

Croatia	53
Macedonia	51
Bulgaria	33
Romania	26
Serbia	13
Ukraine	4
Hungary	0
Moldova	0

Note: Domestic debt denominated in or linked to foreign exchange. Data for Macedonia includes structural bonds.

By developing and following a medium-term debt strategy along these lines, Macedonia can achieve the goal of minimizing medium-term costs subject to keeping risks within appropriate pre-set bounds. As described above, the government has taken the first initial steps toward renewed market development. Further gradual moves in this direction, guided by a comprehensive debt strategy, would bring the goal within reach. Achieving this goal would benefit the budget through lower interest expense and lower risks over the medium term. At the same time, developing a domestic yield curve would yield positive externalities for the real economy, as it would clearly establish a denar yield curve that can be used in pricing private sector loans and bonds.

Traditionally, Macedonia has had low fiscal deficits, ranging from -1% to $+1\%$, but during the crisis in 2009 this grew initially to 2.5% then to 2.8% with our highest in 2012 at 3.8% . In 2013, due to the financial stimulus were at 3.5% . NBRM was able to mitigate successfully because Macedonian public debt was low at around 20% of GDP which afforded us room for expansion which we used during this crisis period.

Table 2: Country data sheet- Macedonia

Population: 2.075.625	2011	2012	2013	2014
GDP (real, in mn eur)	6.415	6.386	6.556	6.803
GDP (nominal, in mn eur)	7.544	7.585	8.112	8.533
GDP per capita in eur	3.105	3.086	3.163	3.227
GDP per capita PPP	9.588	9.529	9.768	10.120
GDP growth	2.3%	-0.5%	2.7%	3.8%
Remittances (in mn eur)	195	198	191	204

Remittances as % of GDP	3.0%	3.1%	2.9%	3.0%
Total investments (in mn eur)	1.668	1.845	1.868	2.082
Investments as % of GDP	26.0 %	28.9 %	28.5 %	30.6 %
Foreign direct investments	344	111	252	262
Foreign direct invest.as % of GDP	5.4%	1.7%	3.8%	3.9%
Total import (in mn eur)	5.053	5.071	4.983	5.485
Total imports as % of GDP	78.8 %	79.4 %	76.0 %	80.6 %
Import to EU (in mn eur)	3.038	3.372	3.397	3.821
Import to EU as % of total import	60.1 %	66.5 %	68.2 %	69.7 %
Total export (in mn eur)	3.215	3.124	3.235	3.723
Total exports as % of GDP	50.1 %	48.9 %	49.3 %	54.7 %
Export to EU (in mn eur)	2.281	2.110	2.386	3.025
Export to EU as % of total export	70.9 %	67.5 %	73.8 %	81.3 %

Source: State Statistical Office (various years, various publications).

Apart from the macro-economy concerns, the crisis with the Euro as a currency helped boost confidence in Macedonian domestic currency [MKD denar]. This is because people naturally began to wonder what would happen with Europe; therefore, its primary currency. As a result, some people began to orient more towards the MKD. Macedonia, like most former Yugoslavian countries are highly Euro-rized, which means people save and use credits in Euros, with a 65% Euro to 35% MKD ratio. During the crisis and continuing today, the ratio of households and their propensity to save in MKD has elevated to 50%.

Methodology

The study involved a field survey conducted in July 2015, by applying a self-administered questionnaire which was distributed among the managers in companies in Macedonia. The survey contained questions on accounting exchange rate exposure, “exposure awareness”. The aim was to collect data and to examine the behaviour of enterprises. Analysis of the data was conducted with a focus on exchange rate exposure. The analysis is based on descriptive statistics and probit and ordered probit regressions. Also, we investigated managers’ attitudes about the impact of business strategies on the intended financial strategy. Attitudes were examined using a five-point Likert Scale, where (L) are large companies and small (S). (FP) are food processing companies and other industries (O). Then companies (N-I) are

non-internationalized and internationalized (I). Companies (D) are diversified (D), companies with a specialization ratio (SR) and undiversified (UnD) companies. Here are companies which were classified as leveraged (L) and unleveraged (UnL). In 45 companies we asked managers what encourages and what limits the use of debt:

- High volatility of EBIT (high business risk) limits the use of debt (lower financial risk);
- Diversification (operations in more businesses) encourages the use of debt;
- Internationalization (sales in other countries) encourages the use of debt;
- Long periods of collection of accounts receivable force the use of debt.

ANALYSIS, RESULTS AND DISCUSSION

This part focuses on the firms which were asked about their opinion for their exchange rate exposure and expectations. As firms are not obliged to register the denomination of items in their books by the accounting system, the volume of FX items may be larger than reported. Firms are required to count export revenues and import expenditures, however, they may have FX income or expenditure from non-foreign trade type activity or they may have FX balance sheet items. This distortion is higher for FX assets and liabilities than for income statement items. On the other hand, the exchange rate exposure perceived by firms is underestimated as a result of low volatility of the exchange rate in the period before the survey. It may easily be the case that firms projected this situation into the future, and thus felt they had no exchange rate risk at all.

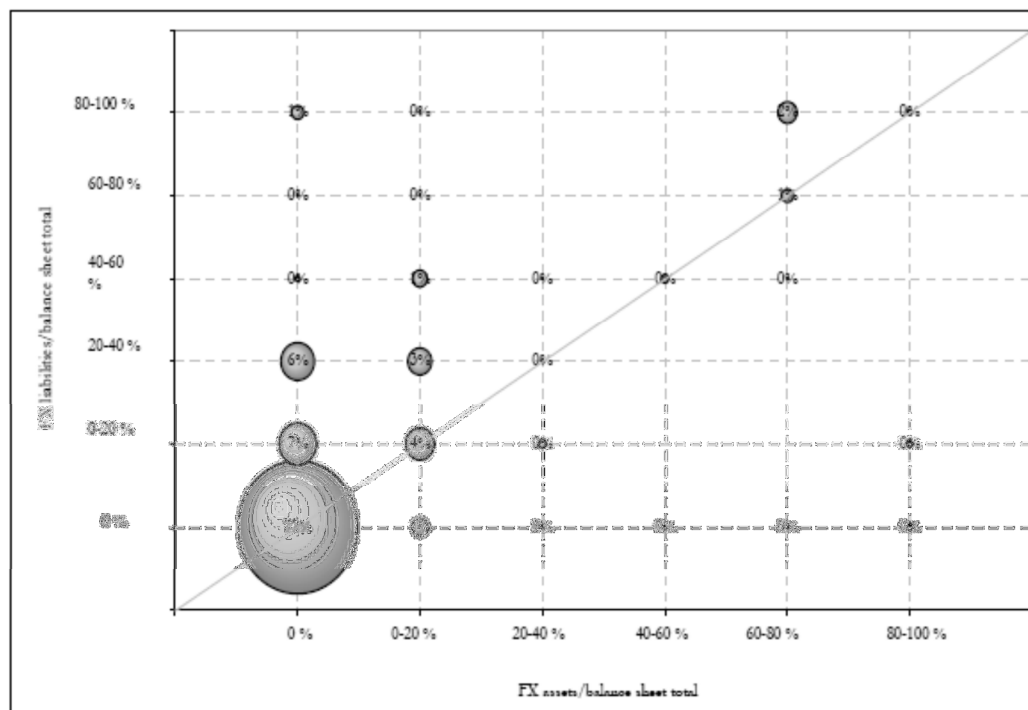
Accounting exposure or currency mismatch (CM) is defined as follows (Loderer and Pichler, 2000):

Stock CM = MKD value of FX assets – MKD value of FX liabilities

Flow CM = MKD value of FX income – MKD value of FX expenditures

In the case of a negative currency mismatch, depreciation of the domestic currency would have negative effect, while appreciation would influence the net position positively. Enterprises may have exchange rate exposure even if currency mismatch is zero, if the scheduling of inflows and outflows differs.

Figure 1: Foreign Exchange Assets and Foreign Exchange Liabilities of Companies

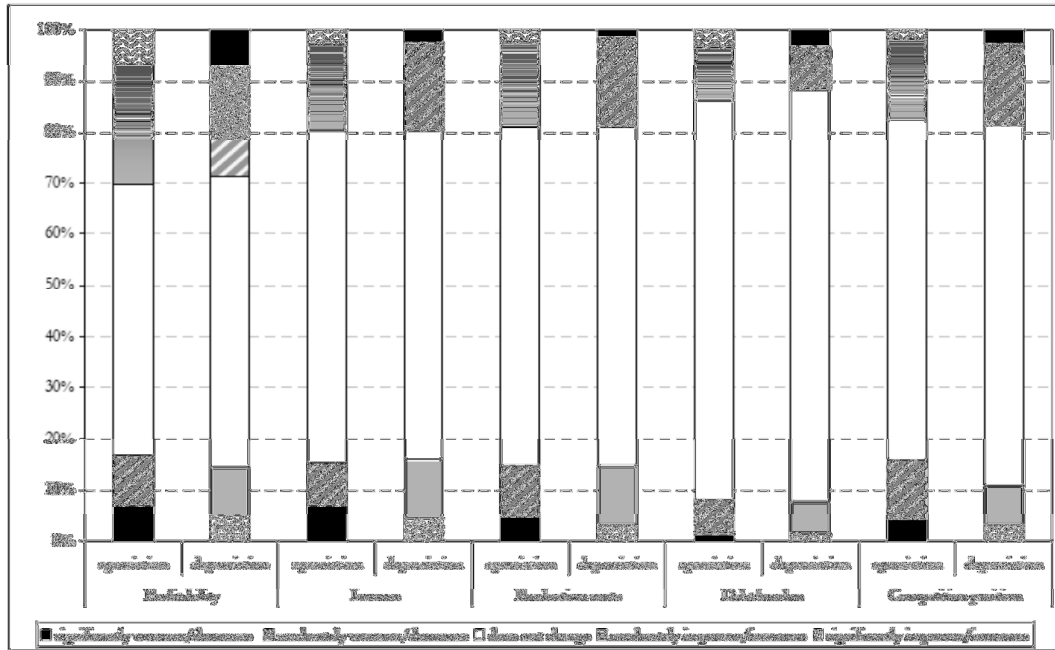


Source: Survey on the Exchange Rate Exposure of Macedonian SMEs.

Note: The size of circles indicates the ratio of the balance sheet total in the given category compared to the total sample.

The variance of flow CM is much higher than it was in the case of stock CM. According to their ratio of balance sheet total, around 70% of enterprises have income or expenditures in foreign exchange. As a whole, there are more enterprises with positive flow CM than with negative flow.

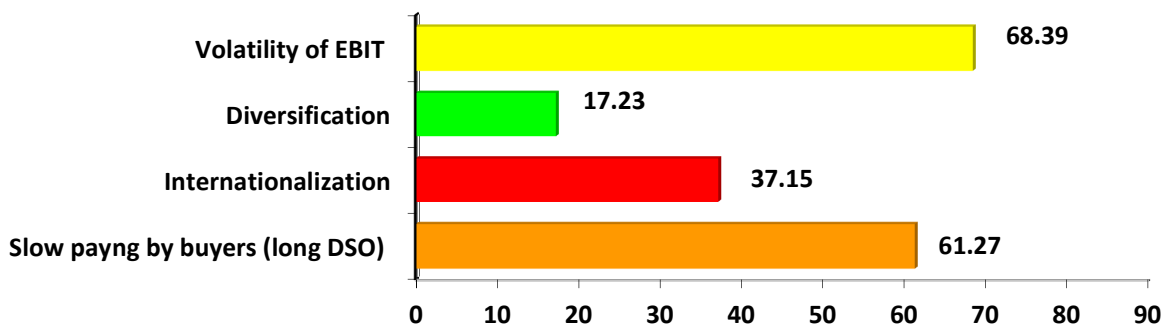
Figure 2: Expectations of Enterprises in Case of a Potential Exchange Rate Change



Source: Survey on the Exchange Rate Exposure of Macedonian SMEs.

The survey responses about the impact of business strategy on intended financial strategy are summarized in Figure 3 and Table 3.

Figure 3. The impact of business strategy elements on financial strategy



Source: Authors' calculations

Table 3. The impact of business strategy elements on financial strategy

	% of companies		Mean										
	Important or very important	Unimportant or with little importance	All	Size		Industry		Internationalization		Diversification		Debt	
				L	S	FP	O	N-I	I	UnD	D	UnL	L
Volatility of EBIT	68.39	3.15	3.807	3.795	3.914	3.935	3.790	3.680	3.987	3.685	3.990	3.675	3.880
Diversification	17.23	48.40	2.463	2.176	2.725*	2454	2.564	2.503	2.572	2.280	2.803	2.286	2.607
Internationalization	37.15	31.05	2.807	2.414	3.130*	2.713	2.983	3.092	2.816*	2.542	3.365*	2.647	2.925
Slow paying by buyers	61.27	8.05	3.601	3.318	3.860*	3.565	3.725	3.680	3.694	3.423	3.928	3.452	3.698

*significant at the 0.05 level.

Source: Authors' calculations

The greatest number of managers sees EBIT volatility as the most important factor of applied business strategy that influences decisions about borrowing: 68.39% believe it is an important or very important factor (mean = 3.807). EBIT volatility can be viewed as a synthetic indicator of business risk in terms of implemented overall business strategy. This indicates that managers are well aware of the need to combine the effects of business and financial risks meaningfully.

In contrast to the views on diversification and internationalization, managers believe that a very practical problem is an important or very important factor of business strategy that determines the level of debt: delay of buyers in meeting their liabilities to the company. More than 61% of managers agreed with this assessment (a mean of nearly 3.6). We found additional statistically significant differences in attitude between managers of small and large companies in terms of how managers see impact of internationalization on level of debt (3.130 versus 2.414).

Managers of small companies also believe more than managers of large companies that diversification encourages the use of debt (2.725 versus 2.176). Finally, not only managers of small companies but also managers of non-internationalized companies and diversified companies are

more inclined to believe that internationalization encourages use of debt. One possible explanation is that managers of small firms find that diversification requires a significant investment that cannot be provided through internal financing and it is necessary to arrange additional borrowing for this purpose. The view of internationalization that managers of diversified firms have may be influenced by their experience of additional borrowing to extend product scope (i.e., diversification), leading them to conclude that additional borrowing is also necessary when it comes to extending geographical scope.

Conclusion: Hedging impact on real businesses

Organizations have to evaluate the risks of doing business on an international level.

As with private investors, business essentially have four options to counteract their currency exposure. The simplest approach is just to monitor the changes, and this can be the best option if companies do not think that they are at a particularly high risk from exchange rate fluctuations.

Another is to lock into an exchange rate for a fixed period of time by setting up a forward contract. If the exposure estimates are correct, this can be a beneficial approach. Some business will also purchase currency in advance if they know that they will be making big purchases and are concerned about volatility.

Third option is to hedge against this exposure via derivatives. Although this may be the most complicated option, it can be effective in limiting exposure to volatility. It can also give a clearer picture of how a company's overseas operations are really performing.

Finally, firms can choose to manage their currency exposure through business practices. Having a truly international company can help with this as, theoretically, losses made when one currency falls will be recovered when another rises. Where contracts are concerned business can also set up clauses that reduce this exposure. In many cases this comes in the form of an agreement to protect the client and the company should exchange movements exceed the agreed-upon level. Some businesses also agree on setting all contracts in their core currency, protecting them from any exposure as they always be paid the same relative amount. Dealing with the currency exposure is all about managing risk, as fluctuations are by very nature unpredictable. However, while private investors only have their own savings to worry about if they fail to manage this risk appropriately, businesses face angry shareholders and a drop in share value – as well as a drop in profits.

Regressions indicated that the exchange rate exposure of a firm is positively related to firm size, foreign ownership, foreign trade activity and FX indebtedness. In terms of sectors, the highest the ratio of firms exposed to exchange rate changes is found in the manufacturing sector, but in transportation and trade sectors the ratio is also higher than average. The majority of companies interviewed are not prepared for changes in the exchange rate. On the basis of their answers, most of SMEs with exchange rate exposure do not assess their exchange rate exposure or deal with its magnitude, and generally believe that they have no exchange rate exposure or that it is negligible. foreign exchange debt, as a means of natural hedging, may reduce exchange rate exposure, but if foreign exchange indebtedness is motivated by the reduction of costs (i.e. payment of lower interest rates upon borrowing, for example), the exchange rate

exposure of the enterprise will grow. Several questions were posed in connection with assessing exchange rate exposure, expectations regarding the potential impact of the exchange rate on profitability, income, costs, debt and competitive position. Enterprises were asked to express their expectations on both the effects of appreciation and depreciation, as exchange rate exposure may be asymmetrical (Figure 2). Half of firms with non-zero CM gave answers, based on which it is clear that they are not aware of the existence of exposure or deem it to be insignificant. About 50% of these firms do not expect the exchange rate to affect any of the aforementioned variables. The other half of this group said they had exposure, but they do not manage it or the answers are contradictory. For example, firms answered that they had no exposure but expected they would be influenced by a change in the exchange rate.

In general, developing countries - the Balkan countries have a shortage of savings and they imported foreign savings. Companies in Macedonia tend to borrow in foreign currency-Euro which is particularly popular in Serbia and Croatia, due to the lower interest rates compared to interest rates on credits in national currency. Differences in interest rates are an indicator of expected future depreciation / appreciation currency in terms of fluctuating exchange rates. The currency risk can be hedged in two ways: if the company is a net exporter and lend in currency of the net exports, or in short-term loans, if agreed today a term exchange rate to repay the loan at the time of the mature. But, in the Western Balkans as we have seen from the above researches there is no developed market of term rates to use this tool. Namely, as an instrument to mitigate foreign exchange risk can serve the following rule - if the company does not generate income in the same currency as the loan is, repayment capacity of the loan should not exceed 50-60 EBIT of the company. In the case of depreciation, the company has the capacity to back the loan. So, those countries which are small and open (as Macedonia) have high indicator on protection of the EUR currency risk through their exports in Euros. These sectors can avoid currency risk by borrowing in Euros.

REFERENCES

- Aabo, T. (2003), The Importance of Corporate Foreign Debt as an Alternative to Currency Derivatives in Actual Management of Exchange Rate Exposures.
- Bishev, G.&Boshkov, T. (2016) Survey Evidence on The Exchange Rate Exposure of Macedonian SMEs, Journal of Modern Accounting and Auditing, ISSN 1548-6583, USA
- Dooley, M. (2000), A model of crises in emerging markets, *Economic Journal* 110, 256–272.
- Edwards, S. (1998), “Openness, productivity and growth: What do we really now?”, *Economic Journal*, 108, 2, (March): 383-98.
- Eichengreen, B. & Hausmann, R. (1999), Exchange rates and financial fragility, in *New Challenges for Monetary Policy* (Kansas City: Federal Reserve Bank of Kansas City).

Eichengreen, B., Hausmann, R. & Panizza, U. (2005), The pain of original sin, in Barry Eichengreen and Ricardo Hausmann, eds.: *Other People's Money: Debt Denomination and Financial Instability in Emerging Market Economics* (The University of Chicago Press).

Goldstein, M. & Turner, P. (2004), Controlling Currency Mismatches In Emerging Markets, Institute for International Economics, Washington, April 2004.

Keloharju, M. & Niskanen, M. (2001), Why Do Firms Raise Foreign Currency Denominated Debt? Evidence from Finland, *European Financial Management*, Vol. 7, No. 4, 2001, pp. 481–496.

Loderer, C. & Pichler, K. (2000), Firms, Do You Know Your Currency Risk Exposure? Survey Results. *Journal of Empirical Finance*, 7: 317–344.

McKinnon, R. & Pill, H. (1999), Exchange-rate regimes for emerging markets: Moral hazard and international over-borrowing, *Oxford Review of Economic Policy* 15, 19–38.

Mishkin, F.S. (1996), Understanding financial crises: A developing country perspective, in Bruno Michael and Boris Pleskovic, eds.: *Annual World Bank Conference on Development Economics* (World Bank, Washington).

Mitchell, M.L. & Stafford E. (2000). Managerial Decisions and Long-Term Stock Price Performance, *Journal of Business*, 73(3), 287-329.

State Statistical Office of the Republic of Macedonia (various years). *Statistical Yearbook*, Skopje.