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Strategic Development Trends in the World Pharmaceutical Industry

Dragan Kesič

The main purpose of the paper is to research and evaluate the strategic development trends in the world pharmaceutical industry in the period 1996–2006. We aim to find that mergers and acquisitions prevail as a vital strategic development option in the world pharmaceutical industry. The research examines the exploratory hypothesis that the intensive globalization process, increased competitiveness and changed structure of competitors, strongly influence the consolidation development trends in the world pharmaceutical industry which result in an increased number of mergers and acquisitions. The intensive consolidation of the world pharmaceutical industry is a market driven process and conditioned by several strategic issues, such as lack of brand new products, increased competitiveness, fast globalization process, intensive global marketing and sales activities, changed structure of competitors, fight for global market shares and customers' loyalty. There is clear evidence that the world pharmaceutical industry and market are both becoming more oligopolistic and monopolistic.

Key Words: world pharmaceutical industry, globalization, consolidation, mergers and acquisitions
JEL *Classification:* F23, I11, L12, L65

Introduction

We may define the major characteristics of the world pharmaceutical industry as follows:

- increased globalization,
- changing structure of competition and increased competitiveness,
- lack of brand new products, despite increased investments into R&D (Research & Development) activities,
- increased importance of regulatory issues (registrations, intellectual property rights, litigations),
- fast consolidation and concentration of the world pharmaceutical industry,

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- development of new therapeutic fields and technologies (biotechnology, pharmacogenomics),
- ageing of the world population and opening up of new, not yet covered therapeutic fields,
- quick development of world generic markets.

The world pharmaceutical market has undergone fast, unprecedented, tremendous and complex changes in the last several years. The pharmaceutical industry is today still one of the most inventive, innovative and the most lucrative of the world so-called 'high-tech' industries, however we may speak at the same time of the period of great and profound changes in this industry sector. We may say that the pharmaceutical industry has been adapting itself more to the market trends and market demands. The pharmaceutical industry today probably unites the biggest of all the humankind potentials. Development of a brand new drug (NAS – New Active Substance) is today estimated to need investment over 1.2 billion USD and takes over 12 years to bring it as a finished, legally registered and approved product to the market place (World Review 2007). This is at the same time a very complex, comprehensive and highly risky job with no final guarantee that a new product might succeed on the market and bring revenues back. If a pharmaceutical company wants to achieve market success, with a brand new product, it needs to invest heavily into marketing and sales activities. As we may observe, the basic research and development activities (R&D), together with marketing and sales activities, are two of the most important activities of the world pharmaceutical industry. Here the biggest investments of the pharmaceutical industry are being poured in. Having analysed these figures, we have found that the biggest, inventive pharmaceutical companies invest on average around 16% of their sales into R&D and even more, around 25% or even more, into marketing and sales activities (Kesič 2006). However, these ratios, especially those for R&D investments, are even higher with specialists, like biotechnology and pharmacogenomic pharmaceutical companies, and much lower with generic pharmaceutical companies (Kesič 2006). As mentioned, the world pharmaceutical industry is structurally not unique, as pharmaceutical companies differ according to their basic performances, vision and strategic development. In our research we found that there are three different groups of world pharmaceutical companies:

- pharmaceutical companies which work on basic research, devel-

TABLE 1 World pharmaceutical market from 2004–2008

Year	Value in billion USD	Growth in %
2004	422	9
2005	601	7.5
2006	643	7
2007	684	6.4
2008	715	4.5

NOTES Adapted from World Review 2009.

opment and marketing and sales of brand new, inventive, original pharmaceutical products (so-called originators),

- pharmaceutical companies which work on development and sales of generic products (so-called generic producers),
- pharmaceutical companies which work on basic research and development of biotechnology and pharmacogenomic products and technologies of new delivery systems (so-called specialists).

The world pharmaceutical market has been growing steadily in the last years. In the year 2006, the world pharmaceutical market achieved total sales of 643 billion USD and a growth rate of 7% (World Review 2007). The fastest growing world markets and regions are the markets of China, Central East European region (Russia, Poland and Romania) and certain markets of Latin America (Brazil, Mexico and Chile).

We may argue that products are the main growth drivers for the world pharmaceutical companies. Pharmaceutical companies strongly compete on products' characteristics and tend to invest heavily into marketing activities in the endeavour to gain prescribers'/patients' loyalty and to compete also directly with other pharmaceutical companies. According to this, it is no surprise that the biggest world multinational pharmaceutical companies invest over 25% of their sales into marketing and sales activities in the endeavour to gain considerable global market shares.

We may define a generic product as bioequivalent product with the same active ingredient as an inventive, original one and it is subject to standard registration procedure as is the original one, too. Nevertheless, it is only legally allowed for a generic product to be launched upon final expiration of all pending intellectual property rights (patents expiry). According to this aspect, and taking into account the fact that generic producers do not need to invest huge sums of money into basic R&D

activities, they compete only on the lower prices of their products. Development of a particular world generic market is in strong connection with the existing legislation, which may favour or not the development and growth of the same.

The world pharmaceutical industry has undergone deep changes in the last decade. Most notably, the strong process of consolidation and concentration has been going on, practically in all three defined pharmaceutical sectors; numerous mergers and acquisitions have occurred, resulting in the forming of complete new companies. We may mention just the most significant ones to illustrate the current situation for a better understanding (Kesič 2003):

- in the group of inventive companies the several acquistions of the USA Pfizer (Warner Lambert, Pharmacia), the merger of GlaxoWellcome and SmithKlineBeecham to create GlaxoSmithKline, the merger of Astra and Zeneca to create AstraZeneca, the merger of Ciba Geigy and Sandoz to form Novartis,
- in the group of generic companies the leading Israeli company Teva has performed over 15 big acquisitions in the last decade, having acquired the USA generic company Ivax as the last one; as well Swiss Sandoz, which is a generic group, owned by Novartis, has acquired likewise several generic companies worldwide, including Lek in Slovenia, Hexal from Germany and Eon Labs. from the USA as the last ones; in the year 2006 the USA Barr Pharmaceuticals acquired the Croatian pharma company Pliva and recently the USA major generic player Mylan acquired the German generic entity Merck Generics,
- in the group of specialists, the USA biotech company Amgen has been greatly acquisitive, predominantly in the USA, having acquired four specialists in the same group segment.

Theoretical Background

We may say that globalization is almost a synonym for the modern economy. Globalization could not be possible without fast and profound technological achievements and changes. Nowadays the global competition is mostly based on the knowledge and technology and ability to serve the customers properly, swiftly and repeatedly. Globalization has become almost a synonym for an economic liberalisation and foremost opening of the world economies. However, alongside the market, competition has changed as well. The previous meaning of internationalization has been replaced by a globalization domain and the previous meaning of the world economy has been replaced by a global economy. OECD defines globalization as 'Spreading and deepening of companies' performance with the target to produce and sell goods or services on multiple markets' (OECD 1993). The later definition of globalization from OECD (1994) says that 'More precisely we may define globalization as a developing pattern of international business cooperation, which includes investments, trade and contractory ways of cooperation, and targets the development of products, production, procurement and marketing. Such kind of international performance enables the companies to conquer new markets, use their technological and organisational advantages and to lower the costs and risks.' Globalization is strongly related with the increased mobility and competition. We underline that the main drivers of globalization are transnational or multinational companies. We may argue that the following characteristics are significant for their performance; especially taking into consideration the performances of the multinational companies in the pharmaceutical industry, we aim to research in our paper the following effects:

- multinational pharmaceutical companies have had a strong market position on the most important and strategic world markets with holding of considerable market shares,
- they globally integrate and connect their business performance, so national identity is no longer important,
- they perform a flexible purchasing management strategy,
- have had a global network structure of production,
- have had a global network organisation of research and development activities,
- have built a global marketing organization structure which supports a dedicated market orientation and a strategic priority focus on customers.

We may even emphasize that globalization is in its core meaning a complex, market conditioned process, which is related to and driven by a whole palette of elements of the market way of thinking and performing, sudden, fast changes and ever-changing ways of doing business, alongside an increasing competition and competitiveness, in striving to optimally identify changing needs of the world customers and to be able to satisfy their longterm needs. In this way we underline that globalization is a market driven process. Thus, in the process of globalization it is essential to be fast, to be strongly market oriented, to have loyal customers, to be innovative, to have proper knowledge, to be able to learn fast, to have proper information and to take quick decisions. Drucker (1992) mentioned five of the most important elements of development which would influence greatly the strategies, structure and performance of future companies:

- economic relations would be performed in the direction among trade blocs instead of countries,
- business performance would be more and more a matter of strategic alliancing, which would be integrated into the world eceonomy,
- restructuring of business would be intensifying and more globalising; it would be important to have information and knowledge,
- strategic management of companies would be decisive for a competitive success,
- intensive market orientation of companies would be a core advantage for achieving competitive advantage over competitors.

Svetličič (1996) defined globalization as:

- a multidimensional process, which includes economic, political, legal and cultural contents, which together create a new quality,
- globalization means the global internationalisation or at least internationalisation of activities such as trade, foreign direct investments (FDI), contractual ways of international economic cooperation in the most important markets,
- globalization supports common alliancing, which needs the global coordination and integration of activities in a brand new manner,
- globalization means production, on the basis of the same products, for domestic consumption and foreign markets as well; the products are able to satisfy local needs and habits,
- globalization means a high share of components from foreign suppliers in the products for domestic consumption and for export as well.

Globalization is a non-return process, and without intensive internationalisation performance of companies in the modern world, it would not progress. Bartlett and Ghosal (1989) underlined that 'Successful companies of today and tomorrow are those ones who are able to satisfy local needs, increase global effectiveness and strive for a constant innovativeness and global learning at the same time.'

Research Questions – Exploratory Hypothesis

The main purpose of paper is to research and evaluate the strategic development trends in the world pharmaceutical industry in the period 1996–2006. The pharmaceutical industry is chosen as it is quite complex, highly inventive and regulated, competitive and has been changing profoundly, concentrating and consolidating strongly in the last decade. Besides that, there are a relatively small and limited number of research papers on the pharmaceutical industry available worldwide as well. We aim to find out what are the core reasons for the huge and increasing number of mergers and acquisitions in the world pharmaceutical industry. According to our knowledge, there are no research papers with this complex content yet available in the world literature.

There are three main research questions – exploratory hypotheses we would like to study with regard to the research work we aim to perform:

- H1 *The globalization process, lack of new products and fight for global market shares supports the concentration and consolidation in the world pharmaceutical industry which is becoming more oligopolistic.*
- H2 *Concentration and consolidation is evident in all three sectors of the world pharmaceutical industry.*
- H3 *Increased competitiveness and the changed structure of competitors further influence concentration and consolidation in the world pharmaceutical industry.*

Methodology and Data

We aim to evaluate the strategic development trends of the world pharmaceutical industry in the period 1996–2006, as we make the exploratory hypothesis that the world pharmaceutical industry has been consolidating strongly in that period and we would like to find out what are the main reasons for such a development trend. In our research work we endeavour to use the analytical, comparative, descriptive methods and a method of strategic analysis, strategic diagnosis and strategic prognosis to determine the development trends in the world pharmaceutical industry in the analysed period. We plan to use in our research work a variety of all literature, different sources and publicly available data and information, predominantly on the business strategies and performances of world pharmaceutical companies, world pharmaceutical markets and development trends within the pharmaceutical industry. Nevertheless, it should be strongly emphasized that there is relatively scarce and limited literature and data at our disposal on the world pharmaceutical industry, especially taking into account the research objectives, as only very limited world literature, sources, information and data on the world pharmaceutical industry are indeed publicly available.

Data Analysis and Findings

In our research we found that competitiveness in the world pharmaceutical industry has been increasing tremendously in the analysed period. We found that the pharmaceutical industry has been in the intensive processes of concentration and consolidation for a period of over 15 years. We found, and thus may argue, that research & development and marketing&sales activities are two of the most important and strategic priorities of the pharmaceutical companies and into which the greatest part of funds are being invested as well. According to our research work, we may say that the main strategic reasons for the intensive consolidation processes of the world pharmaceutical industry, which result in M&A (Mergers and Acquistions) activities, are the following:

- fast globalization processes of the world economy,
- lack of brand new products to drive sales growth further,
- huge investments needed for R&D activities,
- global marketing and sales activities which need large investments as well,
- increased competitiveness,
- changed structure of competitors,
- increased importance of regulatory issues (registrations, intellectual property rights, litigations).

We have precisely studied all available published pharmaceutical companies' data on their merger and acquisition activities and reasons for such a chosen strategy. According to our research study and findings, there have been more than 10,000 various alliances formed in the world pharmaceutical industry in the last decade (Datamonitor 2005). We have found that consolidation processes have been carried out practically in all three sectors (innovative – original pharmaceutical companies, generic producers and specialists) of the world pharmaceutical industry.

TABLE 2 Overview of the major strategic mergers and acquisition in the world pharmaceutical industry from 1995–2005

Year	Strategic mergers and acquistions
1995	Glaxo – Wellcome/GlaxoWellcome (A)
1995	Pharmacia – Upjohn/Pharmacia&Upjohn (M)
1995	Hoechst – Marrion Merrell Dow/HMR (A)
1995	RPR – Fisons/RPR (A)
1995	Ranbaxy – Ohm Laboratories/Ranbaxy (A)
1995	BASF – Boots/BASF (A)
1997	Ciba – Sandoz/Novartis (M)
1997	Roche – Boehringer Mannheim/Roche (A)
1998	Pharmacia&Upjohn – Sugen/Pharmacia & Upjohn (A)
1998	Johnson & Johnson – Centocor /Johnson & Johnson (A)
1999	Astra – Zeneca/AstraZeneca (M)
1999	HMR – RPR/Aventis (M)
1999	Sanofi – Synthelabo/Sanofi-Synthelabo (M)
2000	Pharmacia&Upjohn – Monsanto (Searle)/Pharmacia (M)
2000	GlaxoWellcome – SKB/GlaxoSmithKline (M)
2000	Pfizer – Warner Lambert/Pfizer (A)
2000	Abbott – BASF Pharma – Knoll/Abbott (A)
2000	Teva – Lemmon, Biogal, ICI, APS/Berk, Biocraft, Pharmachemie, Copley, Novopharm (A)
2000	Watson Pharm. – Schein Pharm./Watson Pharmaceuticals (A)
2000	Ranbaxy – Bayer Basics/Ranbaxy (A)
2000	Elan – Dura Pharmaceuticals/Elan (N)
2000	Novartis/Novartis Generics – BASF Pharma Generics – Knoll Generics; Apothecon Inc./ Novartis/Novartis Generics (A)
2001	Novartis/Novartis Generics – Labinca, Lagap Pharmaceuticals/Novartis/Novartis Generics (A)
2001	AlmirallProdesfarma – Prasfarma, Pharmafarm/AllmiralProdesfarma (A)
2001	Johnson&Johnson – Alza/Johnson&Johnson (A)
2001	BMS – DuPont Pharmaceuticals/BMS (A)
2001	Barr Laboratories – Duramed Pharmaceuticals/Barr Laboratories (A)
2001	Roche – Chugai Pharmaceuticals/Chugai Pharmaceuticals – Roche (A)
2002	Amgen – Immunex/Amgen (A)
2002	Chinoin/Sanofi-Synthelabo – Pharmavit/Chinoin/Sanofi-Synthelabo (A)

Continued on the next page

TABLE 2 *Continued from the previous page*

Year	Strategic mergers and acquistions
2002	Schering AG – Collateral Therapeutics/Schering AG (A)
2002	Johnson & Johnson – Tibotec-Virco NV/Johnson & Johnson (A)
2002	Teva – Bayer Classics/Teva (A)
2002	Serono – Genset/Serono (A)
2002	Pfizer – Pharmacia/Pfizer (A)
2002	Novartis/Novartis Generics – Lek/Novartis/NovartisGenerics (Sandoz) – Lek (A)
2003	Johnson&Johnson – Scios/Johnson&Johnson (A)
2003	IDEC Pharmaceuticals – Biogen/Biogen IDEC Inc. (A)
2003	Ranbaxy-RPG (Aventis)/Ranbaxy-RPG (A)
2003	Novartis – Mead Johnson/Novartis – Mead Johnson (A)
2003	Teva – SICOR/Teva – SICOR (A)
2003	Novartis/Sandoz – Amifarma/Novartis/Sandoz – Amifarma (A)
2003	Pfizer – Esperion Therapeutics/Pfizer – Esperion Therapeutics (A)
2004	Roche – Igen/Roche (A)
2004	Sanofi-Synthelabo -Aventis/Sanofi – Aventis (A)
2005	Pfizer – Vicuron Pharmaceuticals/Pfizer (A)
2005	Teva – IVAX/Teva (A)

NOTES A – acquisition, M – merger.

The concentration process has practically created brand new pharmaceutical players; however some previously well-known pharmaceutical firms have practically disappeared from the global market place. For example, the world leading pharmaceutical company Pfizer has been created from 5 big international players, including Pfizer itself, Warner Lambert, Upjohn, Searle and Pharmacia. GlaxoSmithKline has been formed as well from 5 companies, including Smith, Kline, Beecham, Glaxo and Wellcome. The leading generic global player, Teva from Israel, has acquired so far over 15 generic companies worldwide to form today's Teva.

We found in our research study that the transactions value in some acquistions having been performed in the world pharmaceutical industry exceeded several dozen of billions USD, which supports our research outcomes that particular pharmaceutical companies still tend to invest heavily in endeavouring to get strategic control over sales, products, marketing and sales activities, market shares and R&D capabilities of the acquired pharmaceutical company.

TABLE 3 Overview of the largest merger & acquisition deals in the pharmaceutical industry

Year	Acquirer – target	Transaction value in billion USD
2000	Pfizer – Warner Lambert	89
2000	GlaxoWellcome – SKB	79
2009	Pfizer – Wyeth	68
2004	Sanofi-Synthelabo – Aventis	66
2003	Pfizer – Pharmacia	61
2009	Roche – Genentech	48
1999	Zeneca – Astra	32
1999	HMR – RPR	28
1996	Sandoz – Ciba Geigy	28
2000	Pharmacia&Upjohn – Monsanto (Searle)	27

TABLE 4 Overview of the latest pharmaceutical alliances in 2006–2007

Target – taken-over company	Acquirer	Creating of synergies
Schering AG, Germany	Bayer, Germany	R&D, markets, marketing&sales
Serono, Switzerland	Merck KGaA, Germany	R&D, markets, marketing&sales
Schwarz Pharma, Germany	UCB, Belgium	R&D, products, markets, marketing&sales
Altana Pharma, Germany	Nycomed, Denmark	R&D, markets, products, marketing&sales
Hospira, USA	Mayne Pharma, Australia	products, markets, sales
Pliva, Croatia	Barr Pharmaceuticals, USA	markets, products, R&D (biogenerics), sales
Kos Pharmaceuticals, USA	Abbott, USA	R&D, products
Organon BioSciences, the Netherlands	Schering-Plough, USA	R&D, markets, products, marketing&sales
MedImmune, USA	AstraZeneca, UK	R&D, markets, products (vaccines), marketing&sales
Merck Generics, Germany	Mylan, USA	markets, products, sales
Adnexus Therapeutics, USA	BMS, USA	R&D, products

We found in our research that consolidation processes are still continuing to even speed up as pharmaceutical companies try to follow their competitors' strategy of M&A (Mergers and Acquisitions) in endeavouring to maintain their global market position and long-term competitiveness. Recent acquistions of several pharmaceutical companies performed afterwards in the years 2006 and 2007 further confirm our conclusions of a fast consolidation and oligopolization of the world pharmaceutical industry. This confirms properly our third postulated exploratory hypothesis.

In our research we found that the leading ten world pharmaceutical companies currently command an over 43% market share of the global pharmaceutical market. For a comparison reference, this figure was only 30% ten years ago (World Review 2007). This is a clear sign and proof of how intensive market consolidation and concentration of the world pharmaceutical industry has changed the world pharmaceutical market in the analysed period. We also found that the number of new pharmaceutical products having been launched in the world market dropped significantly in the analysed period (from 34 in the year 1996 to only 21 in 2006 (World Review 2007)), thus supporting further consolidation and concentration of the world pharmaceutical industry, as products are key drivers for sales growth of pharmaceutical companies. Thus they are forced to search for new products by merger and acquisition strategies.

Very similarly, we found that the currently leading ten world generic pharmaceutical companies achieve together an over 37% market share of the world generic market. For a comparison, this figure was only 18% ten years ago (Datamonitor 2005). This is yet another proof of how intensive consolidation of the world pharmaceutical industry has changed both the world pharmaceutical industry and the market as well. Thus we confirmed our first two postulated exploratory hypotheses.

We also found that the world pharmaceutical industry has become more and more oligopolistic. We may support and refer this argumentation with the Knickerbrocker theory of oligopolististic reaction (Knickerbrocker 1973), which says that 'Oligopolistic companies, as minimizators of taking risks in avoidance of destroying effects of competition follow each other to new markets to protect their own interests. It is significant that the action of one player creates a reaction of the other competitors, an action creates a reaction and so the story of oligopolisation is going on.' We may conclude that Knickerbrocker's theory perfectly illustrates and explains a consolidation process of the world pharmaceutical industry. By that we confirmed our third postulated exploratory hypothesis.

It is evident that some stand-alone pharmaceutical companies are not able to satisfy longterm and ever-changing market needs and customers' expectations, to invest heavily into R&D and marketing activities in the endeavour to bring new products to global markets and materialize them properly. We can argue that this process enables pharmaceutical companies to generate new development circles and their long-term development and growth. If a particular pharmaceutical company is not able to perform the development circle on its own, it has to look for a suitable partner with whom to form a kind of strategic partnership. Formation of partnerships for the sake of maintaining long-term competitiveness is today one of the most usable strategies in the world pharmaceutical industry. We may argue that pharmaceutical companies make alliances in endeavours to create common synergies and to better exploit their common assets, knowledge, product life cycles and moreover to upgrade their management strategies.

Pharmaceutical companies tend to internationalize and globalize their business activities sooner thab in the past, due to market liberalization, increased competitiveness and the need to react properly to strategic consolidation and concentration activities of competitors.

According to that, Svetličič (1996) stipulates that modern ways of internationalisation with an aid of network formation and strategic alliances enable internationalisation without a growth of companies. Today companies decide for internationalization and alliances in order to:

- be closer to customers,
- increase effectiveness,
- gain better access to technologies and knowledge (know-how),
- protect them from competitors (strategic reasons).

We may say that, in a certain way, the concept of the strong market oriented management clearly designates a company's business philosophy, respectively. We may agree with Corstjen's (1991) estimation that the 'Sector of the pharmaceutical industry, despite being very specific in all aspects, is an ideal case, how a practice and usage of the marketing management concept directly relates to a very successful business performance of this industrial sector.'

According to our research work, we found that the most important and strategic activities of creating common synergies for pharmaceutical companies are the following:

- research and development (R&D), due to creating of brand new products,
- products, due to driving sales growth and gain in market shares,

TABLE 5 Main strategic reasons for creating mergers and acquisitions in the world pharmaceutical industry

Key elements for creating longterm competitiveness	Originators (inventive pharmaceutical companies)	Generic companies	Specialists (biotechnology, pharmacogenomics)
Sales growth	yes	yes	yes
New products	key factor	key factor	key factor
New markets	key factor	key factor	key factor
Marketing and sales activities	key factor	key factor	key factor
Research &Development	key factor	yes, if possible	key factor
Creating of common synergies	yes	yes	yes
Stronger market position-increased competitiveness	key factor	key factor	key factor
Shareholders impacts – financials	yes	yes	yes
Coordination of management and cultures of the companies	yes	yes	yes
Power of globalization	key factor	key factor	key factor

- markets, due to creating geographic and market expansion,
- marketing and sales, due to enforcing marketing and sales activities in order to compete on global markets and to drive further sales growth.

These are the main reasons for strategic and intensive consolidation trends in the world pharmaceutical industry. These facts clearly support and confirm our first two proposed exploratory hypotheses.

We may say as well that, due to the complexity of the pharmaceutical industry, it is not unusual that the pharmaceutical companies tend to form partnerships and even to compete at the same time. They can cooperate on some particular projects (for example R&D projects), however they compete strongly for particular market shares. We have found in our research that this is the so-called 'C and C phenomena', as we may even call it 'Co-opetition' (cooperation and competition at the same time) (Zineldin 2004).

Svetličič (1996) properly underlined that the 'Forming of alliances has become attractive for companies due to:

- rising costs of innovation and entrance to new markets,
- reinforcing of cost reduction competition,
- pressure towards the enlarged gaining of synergistic technologies and economies of scale and synergy with the help of alliances and acquistions,
- the endeavour to protect existing market shares and to conquer new ones,
- the rising need to shrink time needed from an innovation till entry onto the market with a product.'

According to our research work, we may argue that a dedicated strategic management with s strong market orientation is by no doubt, besides the R&D function, the most important function of the innovative company's business performance in the pharmaceutical industry. Changes of today's, even of tomorrows' world, are so fast and profound that it is quite difficult for the companies to follow them entirely. Nevertheless, this is especially significant for the world pharmaceutical industry. However, changes do indeed represent new challenges and create new business opportunities. Thus, it is important to react and act quickly, and to be proactive. The urgency of fast adaptation is not just the strategy for smaller companies and countries, but it is also a valid strategy of victorious success for the bigger firms.

We may forecast that, taking into account the mentioned factors, further consolidation and concentration of the world pharmaceutical industry is quite realistically expected. We may foresee the formation of even bigger pharmaceutical concerns in all three sectors of the pharmaceutical industry. In addition, a further lack of brand new products is expected with highly increased competitiveness and a furious fight for market shares and global customers' loyalty.

Discussion and Conclusion

In our research work we found that the world pharmaceutical industry has been changing profoundly over the last couple of years and that an intensive globalization process definitively influences and reinforces a consolidation of the world pharmaceutical industry. In order to explain this phenomenon properly, we have analysed in detail the trends in the world pharmaceutical industry and key reasons for such movements. We provide empirical evidence that the intensive processes of concentration and consolidation have been continuing in all three sectors of the world pharmaceutical industry. Our research work shows that mergers and acquisitions prevail more and more as a viable strategic orientation for numerous world pharmaceutical companies. Further on, we may argue that increased competitiveness and the amended structure of competitors, which is conditioned by a merger and acquistion process, impact the strategic orientation of particular world pharmaceutical companies. By creating new alliances, they tend to create strategic synergies in the endeavor to be even more successful, competitive and able to continue with further development circles.

We may conclude that all four research questions/exploratory hypotheses put forward at the beginning of our research are entirely confirmed. We found that the intensive globalization process influences the concentration and consolidation in world pharmaceutical industry, which is becoming more oligopolistic and tending to be even more monopolistic in the future. Besides that, the lack of new products, fight for global market shares, increased competitiveness and changed structure of competitors further supports the concentration and consolidation in the researched industrial sector, and moreover, concentration and consolidation is evident in all three defined sectors of the world pharmaceutical industry. By that we have confirmed all three postulated exploratory hypotheses.

Thus we may forecast that intensive consolidation processes in the world pharmaceutical industry are to continue to form even bigger pharmaceutical firms and to speed up an oligopolization and even higher degree of monopolization of the global pharmaceutical industry further on. Based on our research findings, we may even forecast that in the future there will be only three major groups of world pharmaceutical companies: huge-mega inventive pharmaceutical companies, transnational generic companies and focused specialists (biotechnology, pharmacogenomics). We may point out that the fast consolidation of the world pharmaceutical industry is a market driven process and conditioned by typical strategic management issues, such as a lack of new products, intensive and increasing competitiveness, fast globalization process, increased global marketing and sales activities, a fast changing structure of global competitors, and a furious fight for the global market shares and customers' loyalty. We may emphasize that a focused, straight-on strategic management is going to play an even more important and especially a decisive role in the future globalization and concentration processes of the world pharmaceutical industry. We may further conclude that future strategic development of the world pharmaceutical industry will be predominantly dependent on the strategic management issues that the pharmaceutical companies will be capable of understanding„ developing and implementing properly in their operational and strategic business performances. We may argue that strong market oriented management practices are urgently needed for successful business performance today, not to mention tomorrow and months and years to come, in this highly globalized, transparent, complex, demanding, uncertain and competitive world.

References

Bartlett, C. A., and S. Ghosal. 1989. *Managing Across Borders: The Transnational Solution.* Boston: Harvard Business School Press.

Corstjens, M. 1991. *Marketing Strategy in the Pharmaceutical Industry.* London: Chapman and Hall.

Datamonitor. 2005. *Merger and Acquisition 2005.* New York: Datamonitor.

Drucker, P. F. 1992. *Managing for the Future.* London: Butterworth-Heineman.

Kesič, D. 2003. 'Strateško povezovanje Leka in Novartisa.' In *Lastniško upravljanje podjetij in prevzemi,* edited by D. Radonjič, 141–55. Maribor: Ekonomsko-poslovna fakulteta.

———. 2006. 'Dinamičen razvoj svetovnega farmacevtskega trga.' *Delo* FT, 22. maj.

Knickerbrocker, F. T. 1973. *Oligopolistic Reaction and the Multinational Enterprise.* Cambridge, MA: Harvard University Press.

OECD. 1993. STI, no. 13, Special Issue on Globalisation. Paris: OECD.

———. 1994. 'Globalisation of Industrial Activities: Joint Report by the Industry Committee and the Trade Committee.' OCDE/GD(94)60.

Svetličič, M. 1996. *Svetovno podjetje.* Ljubljana: Znanstveno in publicistično središče.

Zineldin, M. 2004. 'Co-Opetition: The Organization of the Future.' *Marketing Intelligence and Planning* 22 (7): 780–90.

World Review. 2007. *The World Pharmaceutical Market.* London: IMS Health Statistics.

Leadership Competencies for Managing Diversity

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The new understanding of diversity involves more than increasing the number of different identity groups on the payroll. An important proposal is that the experience of diversity in an organisation results from pervasive styles of management. This article dealt with the specific paradigms of diversity management and leadership style theory used to address the research problem in the empirical study, namely *'Is diversity management experience related to leadership styles or competencies?'* The models of diversity and inclusion indicators are used to examine the experience of diversity management. The population of this study into the experience of diversity management is two thousand six hundred and sixty nine (2669) respondents. Leadership styles were obtained from four hundred and forty (440) leaders. The Cronbach alpha values were determined in order to indicate internal validity and reliability.

Key Words: diversity management, engaging leadership style, experience, heroic leadership style, management, symbolic interactionism

JEL *Classification:* D740, L290, M120, J53

Introduction

Diversity is a subject that can be very powerful and emotional for everyone who deals with it, either directly or indirectly. Diversity topics deal with issues of being different and alike, inspiration and perspiration, sadness and gladness, privilege and lack thereof, culture and religion, tolerance and justice, and hatred and animosity. Diversity challenges and opportunities impact all nations around the world to one extent or another (Bahaudin and Jatuporn 2009).

The question could be asked, what exactly is 'diversity management,' why does management include it in their organisation objectives, and

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how will it be measured? It may be taking the issue too far to claim that diversity is the most talked about but the least implemented corporate objective. However, the fact remains that as a strategic objective, diversity often constitutes the 'poor relations' and ranks low on managers' lists of priorities (Human 2005, 1).

It is well documented that diversity and diversity management have any number of definitions, interpretations, applications and implications. Is diversity management, as some might say, becoming a cliché, reformed affirmative action, a defining matter or something else? In any event, diversity management remains a question of *what* rather than *if* (Bledsoe and Oatsvall 2008, 7).

The existential present, the 'now,' on which we act, is dynamic and implies a past and future (Mead 1936). Having presented the contextual realities for leadership and diversity management, arising from the past and present, the specific interactive leadership style and diversity management theories were used to address the aim of this article ('What kind of leadership style do organisations need to developed to establish a positive experience of diversity management in order to continue to be successful?') and to propose a diversity leadership competency model.

Von Mises (1996, 42) stated that all actions are performed by individuals: 'A collective operates through the intermediary of one or several individuals whose actions are related to the collective. It is the "meaning" which the acting individual and those who are touched by the actions attribute to an action that determines its character.'

Blumer places primary importance on the foundation of human behaviour through interaction with the 'self.' This specifically underlies actions – it is interaction, real or imagined, with others and the self that is the most important determinant of the behaviour of the individual (Harris 2005). Mintzberg's (2004) engaging leadership style is required to establish a positive experience of diversity management. This article specifically explains the interactive leadership style theory of McClelland and Burnham (1976), Burnham (2003) and Mintzberg (2004) and relies on empirical research. Robertson's (2004) five-factor model, inclusive of the paradigms of Thomas and Ely (1996; 2002), is used to examine the experience of diversity management.

The aim of the study is to determine the kind of leadership competency styles for managers in organisations and to develop and establish a positive experience of diversity management in order to continue to be successful.

The specific objective of this article is to determine diversity management experience in workplaces, whether the experience of diversity differed between race, gender and generational groups and whether this experience related to leadership style.

Leadership Competencies for Managing Diversity

To be successful in today's market, companies need an extremely capable, flexible and dedicated workforce, a flexible and innovative management, and the capability to hold on to developed talent. To accomplish these objectives, the company needs a talented HR department. In addition to hiring the right people to carry out specific jobs, HR managers have to build up dedication and allegiance among the workforce (Manna and Morris 2008).

Organisations of different sizes, structures, and purposes increase their breadth of search, learning capabilities, and resource access thereby reducing the threat of core rigidities in management. However, diverse organisations tend to have different goals, management styles, decision-making processes, and systems that cause communication and coordination difficulties (Jiang, Santoro, and Tao 2010, 1138).

Dreachlin (2007) claimed that new era diversity management tests leadership skills at a deep and personal level. According to Barrett and Beeson (2002), who undertook extensive research into developing leadership competencies for competitive advantage, leadership competencies will change as the competitive environment changes.

They predicted that five critical forces would shape leadership competencies (requirements) in the future, namely (a) global competition, (b) information technology, (c) rapid and flexible organisations, (d) teams, and (e) differing employee needs. Considering these, most organisations will not need the 'Lone Ranger' type of leader as much as a leader who can motivate and co-ordinate a team-based approach (Barrett and Beeson 2002).

This is consistent with the views of Mintzberg (2004), who believes an engaging interactive leadership style is required. In the future, the model of effective leadership will be one of encouraging environments that unlock the entire organisation's human asset potential (Hernez-Broomeand and Hughes 2006).

Barrett and Beeson (2002) furthermore identified four essential roles for meeting the business challenge of the future, and the career 'derailers' who will matter most in the future. The four essential roles for meeting future business challenges, include 'master strategies,' 'change manager,' 'relationship network building' and 'talent developers.' Intensified globalisation, the increasing use of technology, and public scrutiny of the integrity of leaders influence the role of the leader (Hernez-Broome and Hughes 2006).

In essence, Crossan and Olivera (2006) opined that, within the context where organisational boundaries have become less defined and competition dictates radical change, the hierarchical leadership approach has become outdated – 'Distributed leadership has become necessary and no one can manage it all' (Crossan and Olivera 2006, 4).

The overarching interactive competencies of leaders gain further significance when evaluating Gentry and Leslie's (2007) research into leadership requirements. The leadership competencies most favoured in organisations included 'building and mending relationships,' 'bringing out the best in people' and 'listening.' Vision, inspiration and communicational goals were regarded as further important competencies for people in leadership positions.

Gentry and Leslie (2007) furthermore concluded that enhancing business skills and knowledge was not regarded as very important for leadership development. Leslie et al. (2002) identified five characteristics of successful global leaders, namely context, specific knowledge and skills, inquisitiveness, personal character, connecting, and integrity. Leslie et al. (2002) regarded 'duality' (the capacity for managing uncertainty and the ability to balance) and 'savvy' (practical understanding of business and organisation) as important. Goleman, Boyatzis, and McKee's (2002, 38) similar contention was that 'leadership operates best through emotionally intelligent leaders who create resonance.'

Kets de Vries and Mead (1992) submitted that the influences on leadership qualities as well as the ability to adapt culturally result from childhood background and psychological development. In this study, Kets de Vries and Mead (1992) indicated that in addition to standard technical competence and business experience, global managers would need to interact effectively with people 'who are different.' This could be learnt through developmental factors, such as cultural diversity in the family, early international experience, bilingualism, self-confidence, hardiness, envisioning, cultural studies and international environmental studies.

Chang and Thorenou (2004) commented that current literature refers to cognitive factors that may affect the ability of managers to manage across cultures. These cognitive factors include the ability of leaders to manage stereotypes. Human (1996, 49) commented that cognitive complexity could be developed in a person if frequently presented with clear, directed information about the existence of many individual dimensions.

Goleman, Boyatzis, and McKee's (2002, 38) similar contention was that 'leadership operates best through emotionally intelligent leaders who create resonance.' A cognitive, complex person would be able to manage better in situations in which the conditions for multi-dimensional dynamics are presented.

Chang and Thorenou (2004) established five key leadership competencies for managers who manage multicultural groups, namely cultural empathy, learning of the job, communication competence, managerial skills, and personal style.

Among others, the themes related to these competencies were:

- *Cultural empathy:* Cultural awareness, cultural understanding, respect for values, treating people as individuals, using different perspectives and experience in other cultures.
- *Learning of the job:* Adapting to the context, curiosity, willingness to learn, tolerance for ambiguity and being observant.
- *Communication competence:* Listening, open-door policy, clear expression, non-verbal nuances, knowing other languages.
- *Generic managerial skills:* Motivating, consulting, human resource factions, conflict resolution, planning, goal and task focus, budgeting.
- *Personal style:* Emotional stability.

Gudykunst (1988) furthermore suggested a number of competencies for effective interpersonal and inter-group communication, including, among others, tolerance for ambiguity, ability to empathise and the ability to gather and use appropriate information.

Lockwood (2005) adapted the competencies for diversity management:

- Active, non-judgment listening;
- Willingness to change one's own concepts about diversity;
- Collaboration skills;
- Experience with conflict resolution and change management;
- Sensitivity towards terms labelling groups regarding diversity;
- Ability to identify diversity issues and understand related tensions;

- Intercultural team building – ability to express respect and appreciation;
- Openness to learning about others who are different;
- Ability to educate others on how to build diverse people skills; and
- Ability to provide appropriate responses.

Human (2005, 45), referring to Mintzberg's (2004) competency model, described similar competencies of cognitively complex individuals.

Against this background, requisite leadership competencies inherent to leadership styles are addressed, in view of the overall aim, to establish the kinds of leadership styles required by organisations.

Interactive Leadership Styles Theory

McClelland (1975) traced the development of the human need for power and identified the various forms of expression an individual's power orientation may take. Grobler et al. (2006, 218) describe the achievement motivation created by McClelland (1975) as almost as popular as Maslow's hierarchy of needs.

Goleman et al. (2002) also specifically referred to McClelland's (1975) contributions. McClelland (1975) proposed that if an organisation wanted to appoint or promote the best person for a specific job, such as a leadership position, it should discard previous standard criteria.

McClelland (1975) emphasised three needs, namely (a) achievements, (b) affiliation and (c) power. The need to achieve (N-Ach) is defined as a preoccupation with focusing on goals. The need for affiliation (N-Affil) motivates people to make friends, to associate with other people and to become members of a group. The need for power (N-Pow) refers to the need to obtain and exercise control over others. McClelland contended that a good manager has a greater need for power than for achievement. McClelland and Burnham (1976) found that good managers appreciate and desire influence and impact (Hall and Hawker 1988, 12). McClelland (1975) regarded management's behaviour as a function of the characteristics of managers in interaction with the situation in which managers find themselves. Managers will interact in a manner that they find intrinsically satisfying because of their unconscious beliefs. McClelland (1975) explained six managerial styles and matching behavioural patterns which managers apply to situations they encounter:

- Cohesion – immediate compliance;
- Authoritarian – firm but fair;
- Affiliative – people first;

- Democratic – commitment through participation;
- Pacesetting – achievement to a high level of excellence; and
- Coaching – developing unique strengths for the future.

According to McClelland (1975), the most effective style depends on the people, the task and the situation that needs to be managed.

David Burnham and Interactive Leadership

In 2003, Burnham (2003) extended the study he conducted with McClelland in the late 1990s and studied the performance of 140 leaders in 18 organisations. He found that the high performers continued to fall in the power motive, but that their orientation toward power had changed. In the 1970s, he said institutional leaders saw themselves as the source of power, whereas 'today the interactive leaders tend to derive power from others, the team, groups and organizations' (Burnham 2003, 39). Leadership 'was now something to be done with others, whereas in the 1970s it was something done to others' (Burnham 2003, 40).

Burnham (2003) believes the age of the institutional leader has ended. He referred to the social, psychological, technological and economic trends that have converged to demand this change, which influence the assumptions that motivate leadership. According to him, few Baby Boomers, late Generation X'ers and some women bring with them the assumptions of the old-style hero model of leadership. Burnham's (2003) research showed that almost 60% of superior performing groups are led by people with interactive profiles. The interactive leadership approach relies on communication skills. Viewed from a symbolic interactionist perspective, it is concluded that, in interaction with leaders, individuals rely on meaningful reflexive interaction and thus on personally significant and emotional connections through communication. Referring to the leader competency areas of Mintzberg's (2004) model and the diversity management components found by Chang and Thorenou (2004) and suggested by Human (2005), the following model is illustrated in figure 1.

Symbolic interactive engaging leadership competency model inclusive of diversity management, adapted from Mintzberg (2004), Chang and Thorenou (2004) and Human (2005)

Mintzberg's Leadership Competency Model

The work of Mintzberg (2004) supports the aforementioned work and application of McClelland and Burnham (1976). The approach suggested

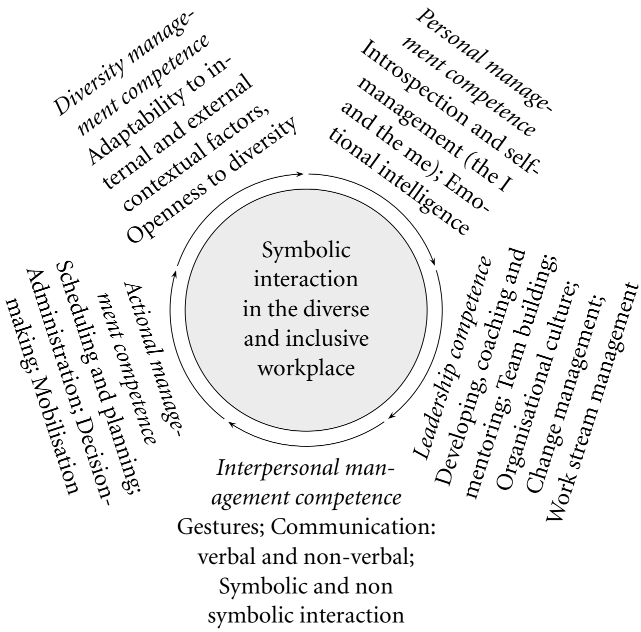

FIGURE 1 Interactive engaging leadership competency model

by McClelland (1975) and Burnham (2003) forms the basis of the leadership style instrument and Mintzberg's model used in the empirical research of this article. Leadership styles are interactive by nature. Of theoretical interest is Mintzberg's (2004) conceptualisation of various interpersonal, information processing and decision-making roles that a manager may perform, since it relates to the process of managing (Parker et al. 1997, 121).

THE HEROIC AND AFFILIATIVE MANAGER

Mintzberg (2004, 119) boldly suggested that contemporary leadership training leads to the placement of managers in senior positions 'who are too smart, too confident, too self-serving and too disconnected.' He termed this style 'heroic,' which is directly comparable with McClelland and Burnham's (1976) 'personal achievement.'

ENGAGING MANAGERS

Mintzberg (2004) opined further that 'engaging managers' should replace 'heroic' managers in organisations. To manage is to bring out the positive energy that exists naturally within people. Managing therefore means engaging, based on judgment, rooted in context. Leadership is sacred trust, earned from the respect of others. It seems that an engaging leader is directly comparable with the socialised manager described by Burnham (2003).

'An understanding of the role of culture in the practical management of diversity requires the cognitive complexity to manage both simultaneously' (Human 1996, 19). Human linked Mintzberg's (2004) 'engaging leadership' with McClelland and Burnham's (1976) institutional manager. Although it is suggested that all individual leaders are a unique combination of the styles described by McClelland and Burnham (1976) – personalised, socialised, affiliation – it is suggested that management styles are not randomly distributed within natural work groups and that a pervasive style would be found in organisations.

Mintzberg's Typology of Leadership Styles Aligned with McClelland and Burnham

Mintzberg's leadership styles are comparable with McClelland and Burnham's (1976) leadership motives and could be presented as a typology of leadership styles, ranging from predominantly 'personalised' (heroic) at one extreme to highly affiliative on the other, with two 'outliers,' namely fight/flight leadership style and even leadership. The typology, originated by Human (1996), is illustrated in figure 2.

It is conceivable that the heroic leadership style could be experienced as acknowledging and even valuing diversity, but that an engaging leadership style could be experienced as actively managing diversity. Leadership styles in the workplace will be determined referring to McClelland and Burnman's (1976) leadership styles, comparable to Mintzberg (2004), as presented in the typology of leadership styles. The characteristics of each of these types, according to the seven-point typology (x axis), are illustrated as measured on a scale from zero to 100 (y axis), and could include the following:

Heroic management style: Obtain performance or delivery at the expense of relationship; Is perceived as autocratic; Create 'parent-child relationships;' Disempowered subordinates; Tell rather than ask and listen; Are perceived as poor managers of diversity; Damage the dignity, self-respect and self-confidence of others.

In view of the high achievement drive associated with leadership style, it is assumed that the heroic leadership style would obtain diversity management delivery as directed and motivated by legislation.

Highly personalised

Heroic	⇒ High personalised power
Heroic tendencies	⇒ Tends to pull towards the heroic
Engaging	⇒ Engaging leadership
Affiliative tendencies	⇒ Tends to put relationships before output/performance
Affiliative	⇒ Stress relationships at the expense of performance
Fight/flight	⇒ High personalised; high affiliation; low socialised
No trends	⇒ No significant statistical differences

Highly affiliative

FIGURE 2 Typology of Mintzberg's leadership style

Heroic tendencies management style: The social power level is higher than in the heroic style. However, there is no statistically significant difference (less than 25 points) between the socialised and personalised power levels. These mangers are more likely to: Tend towards heroic management, particularly in times of stress or pressure; Get the job done; however, some team members may feel disempowered in the process; Be perceived by those with lower levels of personalised power as tending towards being autocratic and as communicating in a parent-child way; Be perceived by some as not a particularly good manager of diversity.

Engaging leadership style: These people are high in socialised power, slightly lower in personalised power (±25 points) and low in affiliation. Engaging leaders tend to: Get the job done through others; Be very assertive but never aggressive; Be respected for their commitment; Provide open, honest, constructive feedback on performance; Be non-defensive, can give and receive; Be builders of systems and people; Be sources of strength; Promote adult-adult relationships; Be perceived as effective managers of diversity

Affiliative tendencies leadership style: These people tend to be high in socialised power, but have a higher level of affiliation than personalised power. Managers with affiliative tendencies will tend to: Deliver, but place relationship before delivery especially in time of stress or crisis; Avoid conflict; Be somewhat laissez fair and sometimes not insist on the achievement of high and challenging goals; Sometimes be perceived as inconsistent and occasionally unfair; Be defensive, especially when being criticised; Not sure of the strength of other people; Create some frustration among heroic managers.

Affiliative leadership style: The affiliative is significantly higher than the personalised and socialised power (more than 25 points). Affiliative managers tend to: Put relationship before performance; Have a need for approval; Lack self-confidence; Avoid conflict; Make ad hoc decisions that can lead to them being perceived as inconsistent or unfair; Be defensive; Not provide effective leadership and direction; Create frustration among colleagues; Create a 'nice atmosphere.'

Thomas and Ely (2002) described the effect of their diversity management paradigms on work group functioning in a qualitative study of three professional organisations, with the aim of theory development. They found three underlying perceptions of diversity, namely integration and learning, access and legitimacy, and discrimination and fairness perceptions. These perceptions, they claimed, 'are governed by how members of work groups create and respond to diversity' (Ely and Thomas 2001, 239).

Viewed from the discrimination and fairness paradigm, managerial processes aim to ensure that employees are treated equally and that no one is given an unfair advantage over others (Ely and Thomas 2001). The more diverse the business becomes, the more it would become legitimate. It needs employees with multilingual skills to serve clients better and so gain legitimacy with them (Thomas and Ely 1996, 25). Thomas and Ely (2002) were of the view that assimilation pushes 'sameness' too much, and differentiation 'overshoots' in the other direction.

Thomas and Ely (2002) concluded that all three paradigm approaches to diversity management could succeed to some extent, but only the integration and learning perspectives contain a rationale that will motivate management and employees in a sustained manner to ensure the long-term success of a diversity programme.

Empirical Analysis and Discussion

The aim of this article is to determine the kind of competency leadership styles that organisations need to develop to establish a positive experience of diversity management in order to continue to be successful. The specific objective was to determine what the experience of diversity management is in selected workplaces – whether this experience differs along race, gender and generational lines; what the predominant leadership styles in organisations are; and more particularly, whether the experience of diversity management is related to the prevalent leadership style.

To address the research question, two instruments are used and the results thereof analysed. A diversity management questionnaire, aligned with the diversity management factor model of Robertson (2004), is used to determine the experience of diversity management in selected organisations. The leadership styles in these selected businesses were determined using the Hall and Hawker Power Management and Style Inventory (Hall and Hawker 1988). In order to achieve the objectives of the study, the experience of diversity management is investigated and the results are presented. Thereafter, prevalent leadership styles in the selected organisations are determined and the results discussed. Having assessed these two research constructs, the results of the leadership styles and experience of diversity management are correlated in order to achieve the aim of this study.

Experience of diversity management is considered to be the development variable, and leadership style as the independent variable in the research model. Race, gender and generational differences are regarded as explanatory moderators.

The empirical study includes two main components, namely leadership style and experience of diversity management. The research questions are studied through an intensive, focused examination of the empirical context for the purpose of analysis, in accordance with symbolic interaction methodology.

The population of this study into the experience of diversity management is 2669 ($N = 2669$) respondents from 11 ($N = 11$) different workplaces nationally. Leadership styles were obtained from 440 ($N = 440$) leaders in the same 11 workplaces. The population of this study into the correlation between leadership style and experience of diversity management is the 11 ($N = 11$) participating workplaces. The Cronbach alpha values were determined in order to indicate internal validity and reliability. An acceptable Cronbach value of 0.5 was used. The Cronbach alpha values for the questionnaire items varied between 0.61 and 0.81.

SURVEY INSTRUMENT

Robertson's (2004) final five-factor model indicted factors comparable to and inclusive of the three paradigms of Thomas and Ely (2002) – Robertson's factor 1 (the fairness factor) aligns with Thomas and Ely's discrimination and fairness paradigm; Robertson's factor 2 (representation of diverse groups) aligns with the access and legitimacy paradigm; and Robertson's factor 3 (leadership's commitment) was the same as the learning and effectiveness paradigm. Robertson found these three factors to be conceptually distinct. The remaining two factors (4 and 5) (employee involvement in work systems and diversity-related outcomes such as learning, growth and flexibility) are indicators of inclusion as defined at the outset of the theoretical study. The last two factors, although similar, were separated. The results of Roberston's study suggest that factor 4 characterises organisations that are diverse, and factor 5 characterises organisations that are inclusive.

The questionnaires were designed as assessment tools for measuring the degree to which employees experience attributes of diversity management, ranging from practices to increase the representation of designated groups to the broader people management initiatives intended to facilitate employee participation and engagement, learning and development in the organisation. The three main sections of the instrument include Robertson's factors (2004) and Thomas and Ely's (2002) paradigms. Questions were grouped in terms of Robertson's three-factor model. The remaining factors (4 and 5) were incorporated in the three sections of the questionnaire.

To comment on the practical significance of groups, standardised differences between the means of the population are used. Cohen (1988), as referred to by Ellis and Steyn (2003), provided guidelines for the interpretation of effect size as: small effect: $d = 0.2$, medium effect $d = 0.5$ and large effect: $d \geq 0.8$. In this article, data with d larger than and equal to 0.8 are considered practically significant. It is furthermore important to know whether a relationship between age, gender and race and the factor on diversity management is practically significant. The article seeks to determine whether the relationship is large enough to be important. In this article, the guideline by Cohen (1988), as referred to by Ellis and Steyn (2003), is used as follows: small effect $w = 0.1$, medium effect $w = 0.3$ and large effect: $w = 0.5$. A relationship with w larger than and equal to 0.5 is considered practically significant. The Spearman rank order correlation coefficient is used, and also serves as an effect size to indicate the strength of the relationship. Steyn (2005) provides guidelines for the interpretation of correlation coefficients' practical significance with $r = 0.1$ small, $r = 0.3$ medium and $r = 0.5$ large. A parallel between the results of the diversity audit and leadership styles obtained from the *Power Management Inventory* (PMI), as presented on the typology of leadership, is drawn using these guidelines. The unit of analysis for the correlation between leadership style and the experience of diversity management is the 11 organisations. The analysis includes data presented in frequencies and means, using the SAS system and SPSS system. The data are analysed by means of various appropriate statistical analyses to infer meaning. Construct reliability and validation of the diversity management questionnaires were originally assessed and confirmed in pilot studies in a South African beverage enterprise from 2004 to 2006. The questionnaire was found suitable for this article. The Cronbach alpha values were determined for each of the subscales included in the diversity management questionnaire used in this article. The average interim correlation with the total was determined in order to establish the strength of factor items. The ideal value between 0.15 and 0.5 was used. The Cronbach alpha values of all subscales were found to fall within the required criteria (between 0.65 and 0.87).

The general reliability and validation of leadership styles PMI (Hall and Hawker 1988) were assessed and confirmed with the motivational scales of the Edwards Preference Schedule (EPS). The report reliability of this inventory was assessed by coefficient alphas of 0.77 for personalised power (heroic leadership style), 0.67 for socialised power (engaging leadership style) and 0.74 for affiliative power, respectively. The diversity management questionnaire was subjected to the interrelationship analysis among the number of variables, and to explain these variables in terms of their common underlying dimensions (factor), an exploratory factor analysis with principal component extraction and Varimax rotation (table 1) was conducted.

STATISTICAL ANALYSIS AND TREATMENT OF THE DATA

Construct reliability and validation of the diversity management questionnaire were originally assessed and confirmed in pilot studies in a South African enterprise from 2004 to 2006. The questionnaire was found suitable for this study.

The Cronbach alpha values (table 2) were determined for each of the subscales included in the diversity management questionnaire used in this article. The average interim correlation with the total was determined to establish the strength of factor items. The ideal value between 0.15 and 0.5 was used.

The Cronbach alpha values of all subscales were found to fall within the required criteria (between 0.65 and 0.87), except for one question ('People generally make racist comments'), which presented a negative correlation of –.007 with the total standardised variables.

The specific question was therefore removed from the section and

TABLE 1 Varimax rotated factor for representation of diverse groups – staffing and people management

Representation of diverse groups	(1)	(2)
Receiving open and honest feedback on performance	0.76	—
Performance is regularly appraised	0.72	—
Enough pressure on managers to develop diversity of staff	0.68	—
Satisfied with the way talent and potential have been assessed	0.67	0.34
Training is based on individual needs	0.65	—
Defined targets to improve diversity	0.64	—
People who deserve promotions get them	0.59	0.45
Recruitment and selection policies are fair	0.58	0.41
Individual career plans are in place	0.58	—
Employees are regularly consulted about diversity	0.51	—
What you know and how you perform get a promotion	—	0.81
Increasing diversity does not lower standards	0.30	0.62

NOTES Column headings are as follows: (1) performance management – factor 1, (2) standard of work – factor 2.

TABLE 2 Cronbach alpha coefficient values for diversity management subscales

Factor	Alpha value
Section 2: Leadership commitment – strategic alignment	0.82
Section 3: Representation of diverse groups – staffing and people management	0.87
Section 4: Treatment fairness – diversity management*	0.65

NOTES * Question 2 has been removed from this subscale

treated as a separate entity in analysis. The discrimination values indicated by the individual Cronbach alpha values for deleted questions (sections 2 to 4) are presented in table 2. To answer the research questions, which arose from the objectives of the research towards the overall aim of this article, a survey was undertaken in 11 organisations from selected companies. The diversity management questionnaire used was found to be inclusive of the five-factor diversity and inclusion management model of Robertson (2004) and paradigms of Thomas and Ely (1996; 2001; 2002).

RESEARCH FINDINGS

What is the experience of employees with regard to diversity management in all selected organisations?

The mean scores of the items included in each of the three factors (factor scores) were determined for each respondent so that the factor scores are interpretable on the original Likert scale (1 = very negative; 2 = negative; 3 = neutral; 4 = positive; 5 = very positive). Throughout the descriptive results, reference to the mean of the factor scores is indicated using the symbol M and 'SD' to indicate standard deviation.

Most of the mean scores for the experience of diversity management for all three main factors were somewhat neutral, with a tendency towards the negative for Factors 1 and 2. Respondents leaned more towards the positive for Factor 3. An interesting aspect is that the mean score for Factor 3 (diversity treatment fairness), was visibly more positive (M = 3.19) compared to the mean scores for Factor 1 (leadership commitment to diversity strategic alignment) – M = 2.85 (d = 0.41) and Factor 2 (representation of diverse groups – staffing and people management) – M = 2.85 (d = 0.47). This implies that employees are visibly less positive in assessing that leaders are genuinely committed to the strategic alignment of diversity management and the people management process than about social interaction between race, gender and age groups and that work processes are fair.

The mean scores for each item included in the three main factors were regarded as significant in understanding the specific diversity management experience.

Because the majority of the organisations were in the production sector, by far the largest number of respondents (63%) was designated in terms of the Employment Equity Act (No 66 1998), being black Africans, coloured and Indian, while 37% were white respondents. The majority of the respondents were traditionally male (78.7%), while only 21.3% were females.

The results show that respondents are mostly neutral to positive in their belief that managers are genuinely committed to racial and gender equality, while they seem negative about senior management's commitment to employing people with disabilities. Respondents tend to remain neutral to positive in the belief that communication on diversity issues is not experienced as effective. The mean scores for factor 2 items indicated a more negative experience related to diversity representation and the people management processes.

In general, respondents indicated a somewhat negative experience for factor 2. While respondents were neutral about whether clearly defined targets exist, they tend to be somewhat more negative in their response that people management and staffing practices are fair. Respondents disagreed (M = 2.9) that individual career plans are in place, or that recruitment and selection practices are fair (M = 2.8). Similarly, they did not experience promotion practices as fair (M = 2.7). Respondents were also negative in their response to 'it is who you know' rather than 'what you know and how you perform' that results in promotions (M = 2.9).

While respondents were neutral (M = 3.0) in their view that they receive open and honest feedback, they were more negative about the skill of managers to develop subordinates (M = 2.7) or that enough pressure is put on managers to develop subordinates (M = 2.7). Moreover, respondents tended to be negative about regular performance appraisal occurrences (M = 2.9) or that training is based on individual needs.

Respondents specifically appear relatively neutral to positive in their experience of greeting each other regardless of race (M = 3.08), mixing at social functions (M = 3.0) and being willing to learn about each other's cultures (M = 3.0).

This might indicate a degree of intercultural sensitivity and a sense of appropriate social behaviourism. Although social interaction scores for the experience of treatment fairness (Factor 3) are mostly neutral to positive, it is interesting to note that the experience of racist and sexist comments is somewhat more negative. It would appear as if sexist comments might be regarded as slightly more prevalent (M = 2.68) compared to racist comments made (M = 2.99).

Respondents indicated that 'Black people accuse white people of racism when criticised' (M = 3.4), while they were slightly negative about women accusing men of sexism when they are criticised (M = 2.8). Of note is that respondents generally disagreed that 'White people believe reverse discrimination exists' in the workplace (M = 3.4).

Generally, these results could indicate that overt discrimination is not experienced. The experience of staffing, people development and leadership commitment practices is less positive.

For the purpose of analysing the relationship between the experience of diversity management and leadership style, the respondent leaders were considered as a proportion of the leaders in each workplace with certain leadership styles. Mintzberg's (2004) leadership styles are comparable with McClelland and Burnham's (1976) leadership motives and are referred to as a typology of the leadership styles, ranging from predominantly 'personalised' (heroic) at one extreme, engaging at midpoint, to

TABLE 3 Correlation between leadership style and diversity management factors

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Factor 1	−0.35	0.15	0.35	−0.17	0.10	−0.47	0.02
Factor 2	−0.41	0.04	0.44	−0.05	0.19	−0.36	0.19
Factor 3	−0.06	0.09	0.22	−0.01	−0.09	−0.38	−0.01
Q1.1	−0.26	0.10	0.33	−0.08	−0.10	−0.51	−0.11
Q2.1	−0.20	0.05	0.38	−0.11	0.05	−0.55	−0.07
Q8.3	−0.58	0.17	0.47	−0.15	0.31	−0.12	0.38
Dd2	0.63*	−0.03	−0.69*	002	−0.03	0.24	−0.07

NOTES Column headings are as follows: (1) variable, (2) heroic, (3) heroic tendencies, (4) engaging, (5) affiliative tendencies, (6) affiliative, (7) fight/flight, (8) even. Spearman rank order correlations, MD pair wise deleted. * $p < .05$.

highly affiliative at the other, with two 'outliers,' namely fight/flight leadership style and even leadership.

The results of the Spearman rank order correlations are presented (table 3) next, to determine the relationship between the experience of diversity management and leadership style, and more specifically to establish whether an engaging leadership style yields a more positive experience of diversity management, as suggested by the theoretical study. The Spearman rank order coefficient $r = 0.3$ is regarded as a medium practical or visible relationship and $r = 0.5$ is regarded as large and a relationship important in practice to determine the relationship between the two variables. The Spearman rank order correlation is indicated using the symbol 'SR.' Spearman rank order correlations (SR) between leadership styles and the three main factors were determined. For the purpose of these correlations, three specific questions about leadership style from factors 1 and 3 were included. These were: 'senior managers are genuinely committed to racial equality' (question 1, section 1, referred to as Q1.1 hereafter), 'Senior managers are genuinely committed to gender equality' (question 2, section 1, referred to as Q2.1 hereafter) and 'My manager generally treats me with dignity and respect' (question 8, section 3, referred to as Q8.3 hereafter).

In addition, Spearman rank order correlations were determined for Dd2 'People generally make racist comments.' Large significant correlations are indicated in table 3.

Table 6 shows that heroic leadership style correlates visibly negatively with factor 1 and factor 2, as well as being practically significant with Q8.3

('My manager generally treats me with dignity and respect'). Consistent with the Mintzberg model (2004), and McClelland and Burnham's theory (1976), the engaging leadership style correlates visibly positively with factor 1, factor 2, Q1.1 and Q2.1 and is practically significant with Q8.3. The fight/flight leadership style shows a practically significant negative correlation with factor 1, Q1.1 and Q2.1 and a visibly negative correlation with factors 2 and 3. It is interesting to note that no practically significant positive correlations were established for leaders with heroic tendency leadership styles.

On the other hand, the engaging leadership style resulted in a medium positive practically significant correlation with most of the dimensions measured in this study. As could be expected, the affiliative and even styles appear to correlate positively with the experience of being treated with dignity and respect by the manager, whereas the fight/flight style correlates negatively with factors 1, 2 and 3.

Quite significant in these specific results is the strong positive correlation (SR = 0.63) between the heroic style and Dd2 ('racist comments generally made'), whereas a negative correlation exists between such comments and engaging leaders (SR = –0.69). The theoretical explanation of behaviour associated with the heroic leadership style suggested that the heroic leadership style could lead to communication that could be perceived as undignified and not 'race and gender free.'

From the information above, it is clear that the predominant leadership style is affiliative tendency and affiliative (43% for the combined percentage). Heroic and heroic tendencies measure 36% (for the combined percentages), as the alternative styles in the 11 workplaces. Mintzberg's (2004) preferred engaging leadership style is less commonly found in the workplaces (12%).

Conclusion and Contributions

The aim of the article was to determine the kind of leadership competency styles for managers in organisations and to develop and establish a positive experience of diversity management in order to continue to be successful. The specific objective was to determine the diversity management experience in the workplaces, whether the experience of diversity differed between race, gender and generational groups and whether this experience related to leadership style. The results suggest that the prevalent leaders' style in workplaces might be predictors of diversity management experience. It appears as if cultivating an engaging leadership style, as robustly campaigned for by Mintzberg (2004), could contribute to establishing a positive experience of diversity management. Diversity management indeed becomes a process of establishing interactive engaging leadership.

Leadership competencies centre on the ability to influence co-operative work towards achieving organisational objectives. Underlying all the competencies of Mintzberg (2004) is the ability to manage diversity in the ever-increasingly diverse workplace. As seen from the competency requirements of Chang and Thorenou (2004), these include respecting values, treating people as individuals and using different perspectives. The learning on the job competencies found in their study furthermore included tolerance for ambiguity and adapting to the context with curiosity and willingness to learn.

These competencies equally could be aligned with openness to diversity as presented in the five-factor model of Robertson (2004). From the symbolic interactive perspective, this competency would in essence include all the dimensions of the model, in that it requires an ability to adapt to the relevant situations, the ability to show empathy, communicate openly and honestly. According to Mead (1936), 'the novel action of the "I" (leader) can cause changes in the attitudes of others' (Perinbanayagam 2005, 348).

Although fewer women participated in this study, male respondents are more positive than female respondents, except for one workplace, where a more engaging leadership style prevails. Understanding the influence of leadership style may prove instrumental in understanding some of the dynamics of the diversity management experience. The older the respondents, the more likely they were to favour engaging leadership styles. Most races favour the engaging leadership style with a positive experience of a negative one with fight/flight, whereas white respondents favour the heroic leadership style for diversity fairness and correlate negatively with the engaging leadership style for this factor. The empirical results of diversity experience, as understood from the inclusion and diversity model of Robertson (2004) as a component of leadership style, interpreted from the contemporary interactive leadership theory of McClelland (1975), McClelleand and Burnham (1976), Burnham (2003) and Mintzberg (2004), support the leadership/diversity competence model.

Generally, the results of this study contribute to the understanding of leadership as a diversity-related determinant in the world of work.

References

Bahaudin, G., and S. Jatuporn. 2009. 'Situational Leadership and Diversity Management Coaching Skills.' *Journal of Diversity Management* 4 (1): 1–12.

Barrett, A., and J. Beeson. 2002. *Develop Leaders for 2010.* New York: The Conference Board of Canada.

Bledsoe, M. T., and R. J. Oatsvall. 2008. 'Diversity Management: A Preliminary Review of Selected Non-Profit North Carolina Independent Colleges and Universities (NCICU).' *Journal of Diversity Management* 3 (1): 7–13.

Burnham, D. 2003. 'Prime Motive Average Performance can be Turned into Stars. But their Leadership Development Needs to Focus on What Motivates Them – Not How They Behave.' *People Management,* no. 9: 37–39.

Chang. S., and M. P. Thorenou. 2004. 'Competencies Needed for Managing a Multicultural Workplace.' *Asia Pacific Journal of Human Resources* 42 (1): 57–74.

Cohan, J. 1988. *Statistical Power Analysis for the Behaviour Sciences.* 2nd ed. Hillsdale, NJ: Erlbaum.

Crossan, M., and F. Oliviera. 2006. 'Cross-Enterprise Leadership: A New Approach for the 21st Century.' *Ivey Business Journal* 70 (5): 1–6.

Dreachlin, J. L. 2007. 'The Role of Leadership in Creating a Diversity Sensitive Organization.' *Journal of Healthcare Management* 52 (3): 151–5.

Ellis, S. M., and H. S. Steyn. 2003. 'Practical Significance (Effect Sizes) versus or in Combination with Statistical Significance (*P* Value).' *Management Dynamics* 12 (4): 51–3.

Ely, R. J. and D. A. Thomas. 2001. 'Cultural Diversity at Work: The Effects of Diversity Perspectives on Work Group Processes and Outcomes.' *Administrative Science Quarterly* 46 (2): 229–72.

Gentry, W. A., and M. Leslie. 2007. 'Competencies for Leadership Development: What's Hot and What's Not When Assessing Leadership-Implications for Organization Development.' *Organization Development Journal* 25 (1): 37–46.

Goleman, D., R. Boyatzis, and M. A. McKee. 2002. *Primal Leadership: Learning to Lead with Emotional Intelligence.* Boston, MA: Harvard Business School.

Grobler, P., S. Warnich, M. R. Carrell, N. F. Elbert, and R. D. Hatfield. 2006. *Human Resources Management in South Africa.* 3rd ed. London: Thomson.

Gudykunst, W. B., ed. 1988. *Language and Ethnic Identity.* Clevedon: Multilingual Matters.

Hall, J., and J. Hawker. 1988. *Power Management Inventory.* Woodland, TX: Teleometrics International.

Harris, C. D. 2005. 'Symbolic Interaction as Defined by Herbert Blumer.' Http://www.cdharris.net/text/blumer.html.

Hernez-Broome, G., and R. L. Hughes. 2006. 'Leadership Development: Past, Present and Future.' *Human Resources Planning* 27:25–31.

Human, L. 1996. *Contemporary Conversations: Understanding and Managing Diversity in the Modern World.* Goree: Goree Institute.

———. 2005. 'Current Issues and Practical Realities for Global Diversity.' Paper delivered at ASTD 2005 Conference, Cape Town, 2–4 February.

Jiang, R. J., Q. T. Tao, and, M. D. Santoro. 2010. 'Alliance Portfolio Diversity and Firm Performance.' *Strategic Management Journal* 31 (10): 1136–44.

Kets de Vries, M., and C. Mead. 1992. 'The Development of the Global Leader Within the Multinational Corporation.' In *Globalizing Management: Creating and Leading the Competitive Organization,* edited by V. Pucik, N. M. Tichy, and C. K. Barnetts: 187–205. New York: Wiley.

Leselie, J. B., D. Dalton, C. Ernst, and J. Deal. 2002. *Managerial Effectiveness in a Global Context.* Greensboro, NC: Centre for Creative Leadership Report.

Locwood, N. R. 2005. 'Workplace Diversity: Leveraging the Power of Difference for Competitive Advantage.' Http://www.shrm.org/research/quaterly/2005/0605RQuart_essay.asp.

Manna, R., and R. Morris. 2008. 'Strategic Aspects of the Importance of Employee Management.' *Journal of Diversity Management* 3 (1): 3226–31.

McClelland, D. 1975. *Power: The Inner Experience.* New York: Irvington.

McClelland, D., and D, H. Burnham. 1976. 'Power is the Great Motivator.' *Harvard Business Review* 54 (2): 100–10.

Mead, G. H. 1936. *Movements of Thought in the Nineteenth Century.* Chicago: University of Chicago Press.

Mintzberg, H. 2004. *Managers not* MBAs*.* London: Prentice Hall.

Parker, B., R. K. Brown, J. Child, and M. A. Smith. 1997. *The Sociology of Industry.* London: Allen and Unwin.

Perinbanayagam, R. S. 2005. 'The Other in the Game: Mead and Wittgenstein on Interaction.' In *Studies in Symbolic Interaction* 28, edited by N. K. Denzin, 341–353. Bingley: Emerald.

Robertson, Q. M. 2004. Disentangling the Meanings of Diversity and Inclusion. Working Paper 04-05, Centre for Advanced Human Resource Studies, Cornell.

Steyn, H. S. 2005. 'Handleiding Vir die Bepaling van Effekgrootte Indekse en Praktiese Betekenisvolheid.' http://www.puk.ac.za/fakulteit/natuur/skd/index.html

Thomas, D. A., and R. J. Ely. 1996. Learning for the Future: Making the Case for Teaching Diversity. *Harvard Business Review* 74 (5): 79–90.

———. 2001. 'A New Paradigm for Managing Diversity.' *Harvard Business Review* 74 (5): 79–94.

———. 2002. 'Making Differences Matter: A New Paradigm for Managing Diversity.' *Harvard Business Review* 74 (5): 79–90.

Von Mises, L. 1996. *Human Action: A Treatise on Economics.* 3rd ed. New York: Contemporary Books.

The Importance of Brand Liking and Brand Trust in Consumer Decision Making: Insights from Bulgarian and Hungarian Consumers During the Global Economic Crisis

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Zsuzsa Deli-Gray
Al Rosenbloom

This paper presents the research findings of a global brand study conducted during the recent global economic crisis. The study sought to understand how four brand constructs (country-of-origin, brand familiarity, brand liking and brand trust) would influence global brand purchase intent in a sample of consumers living in Bulgaria and Hungary. Step-wise regression models were used for the study's twenty brands for consumers living in both countries. The regression models indicated that brand liking and brand trust were the most important predictors of purchase intent in both groups. The paper discusses the relevance of these findings for marketing global brands in post-crisis environments in both countries.

Key Words: brand trust, brand liking, Hungary, Bulgaria, global marketing
JEL *Classification:* M31

Since the fall of the Berlin Wall in 1989, the geo-political as well as the marketing landscape of Central, Eastern and South Eastern Europe has changed significantly. As is often noted, in those countries that were attempting to replace their legacy of state-led socialism with market-based approaches to economic development, consumers created substantial demand for goods and services in their attempt to play catch-up with Western European living standards. The opportunity to purchase many new, different, foreign goods, quickly gave customers a much wider selection of 'known' brands from which to choose. Consumer purchase

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was motivated by the desire not only to possess products previously restricted but also to show to society what 'new' things individuals had. The opening of previously closed, restricted markets therefore created tremendous opportunity for Western multinationals. As a result, multinationals 'flooded [these] markets with their international brands and products' (Schuh and Holzmülle 2003, 176).

The initial phase, in which early market entrants gained significant sales, was soon replaced by increased market competition. By 2006, A. T. Kearney noted that global retailer interest in Eastern Europe had declined significantly from previously 'very high interest' in the region between 2000–2005. Their report noted, 'This doesn't mean the region is losing its allure; rather, it indicates that the "boom" following the end of the Cold War is starting to fade. Indeed, the rush is ending primarily because the market is filling up' (Kearney n. d.).

Salter (2006) provides a realistic antidote to the sweeping generalizations that are sometimes made about the region. He notes, 'The West tends to view the fall of the Berlin Wall as a light switch that illuminated Eastern Europe to the prosperity of capitalism. In reality, the transition remains a laborious endeavor filled with trial-and-error and expensive mistakes' (paragraph 2).

The recent global financial crisis, however, has raised new questions regarding the region's economic development and progress. At the global level, Philippe Le Houérou, World Bank Vice-President for Europe and Central Asia, summarized the crisis's regional impact by noting that 'For years now, Emerging Europe and Central Asia have roared along in high gear. But the global crisis and the drying up of external private financial flows are stalling the engine of growth, prompting many [countries] to downshift and some to even slip into reverse' (The World Bank 2010).

Yet, in spite of these larger macroeconomic shifts, consumer attitudes towards foreign brands did not change much. Having now had a decade of access to and experience with foreign brands that, before 1989, they had only heard of, consumers in Central and Eastern Europe (CEE) did not want to lose that freedom of choice. Furthermore, there is tacit knowledge that in some CEE markets, consumers only needed to 'think' that a product came from the United States, Western Europe or Japan to motivate purchase. For example, the Hungarian clothing company, Budmill, has become successful by intentionally creating a Western European sounding name to tap such consumer inferences. A product's true country of origin was examined by few consumers, and brands only needed to sound American, Japanese or Western European for consumers to like and buy them.

The research we report in this paper is about how customers evaluate global brands in two Central and Eastern European countries under the recent financial crisis. We presented 20 global brands to consumers in Hungary and Bulgaria and asked them to evaluate each brand in terms of their familiarity with, their liking of, their trust in it, and the possibility of purchase. They also were asked about the importance of country-of-origin (COO) in their purchase decision. Regression models were built for all 20 brands in both countries to test for significant differences between Hungarian and Bulgarian consumers. We note here that our research is not longitudinal. The research, however, was conducted from mid-2008 to early-2009 and thus captures consumer global brand attitudes in both countries during the global recession. While we believe the insights gained into consumer decision making in Hungary and Bulgaria are sufficiently interesting on their own to report them here, we also believe our research provides insight into global brand strategy midway in the recession/crisis itself. Researchers could use the findings reported here as a baseline to longitudinally measure changes in global brand attitudes post crisis.

Global Brands

Brands are often considered the cornerstone of marketing. Brands transform generic products into entities that consumers will want to purchase and for which they will pay a premium to acquire (Aaker 1991). There is almost universal agreement in the marketing literature that 'to brand' a product involves more than giving a generic product a name. As the American Marketing Association definition of branding indicates, branding includes color, design, or symbols that are specifically associated with one product. Branding is the complex interplay between the product's physical attributes and the psychological and social attitudes/beliefs created in the targeted consumer's mind that differentiates one product from another (Simoes and Dibb 2001).

Successful product branding has a number of important consequences for firms – perhaps the most salient of which is the creation of brand equity. Brand equity is a summary measure of a brand's ability to attract and retain loyal customers expressed in monetary terms. Yet brand loyalty does not happen instantaneously. It accrues to the brand over time and is, undoubtedly, a tangible expression of marketing strategy. Brand loyalty always involves trust, since it is trust that solidifies the brand-customer relationship over time. In addition to brand trust, brands also involve constructs of brand image, attitude towards the brand, brand personality, and brand associations. As the voluminous branding literature testifies, brands are exceedingly complex entities.

Market-oriented firms understand that they must continually monitor, refine and reposition their brand(s) in order to deliver consumer value long term. In increasingly competitive markets, the need for effective strategic brand management processes becomes essential. A firm's brands also have wider, organizational effects. Brands are ambassadors for the firm itself. Consumers reach conclusions about what a firm stands for, whether the firm is a good corporate citizen and whether the firm is ethical or not from perceptions of the firm's brands. This multifaceted relationship leads directly to the question of what is a global brand?

A common starting place is with a definition: 'A global brand is defined as the worldwide use of a name, term sign, symbol, design or combination thereof intended to identify goods or services of one seller and to differentiate them from those of competitors' (Ghauri and Cateora 2010, 356). This definition clearly is written from the firm's view, since its focus is on the internal processes of brand design and differentiation. Recently, scholars have begun to define global brands from both a consumer as well as a supplier perspective. Roberts and Cayla (2009) note that 'definitions of global brands are mostly supply side' (p. 350). They assert that a brand's globalness is defined in terms of number of markets served, size of markets served and the extent to which the brand shares consistent technical specifications across these markets. This parallels the traditional definition of a global brand stated earlier (Ghauri and Cateora 2010). Roberts and Cayla (2009) also note that while a consumer-centric view of global brands (that is, the process by which consumers categorize brands as 'global') is desirable, such a view is still underdeveloped in the marketing literature. Steenkamp, Batra and Alden (2003) are very clear that 'a brand benefits from consumer perceptions that it is "global" [...] only if consumers believe the brand is marketed in multiple countries and is generally recognized as global in these countries' (p. 54).

Rosenbloom and Haefner (2009) have analyzed global brand definitions from both the firm's and the consumer's perspectives. Their literature review found only one global brand definition that integrated both consumer and producer orientations: A global brand was defined as 'the multi-market reach of products that are perceived as the same by both consumers and internal constituents' (Johansson and Ronkainen 2005, 340). Firm and consumer perspectives are aligned through a global brand strategy, since the firm's intentional branding strategy is perceived as such by targeted consumers in multiple countries. The approach used in this research follows both Steenkamp, Batra and Alden's (2003) perceived brand globalness and Dimofte, Johansson and Bagozzi's (2010) most recent work on global brand effect that simply states, a global brand is 'a brand that is perceived to be widely available and recognized as global' (p. 85). In this research, if a survey respondent in Hungary or Bulgaria thought a brand was global, then it was.

Hierarchical Model

Marketing is replete with a number of hierarchical models. AIDA (awareness-interest-desire-action), Lavidge-Steiner Model (1961) and Engel, Kollat and Blackwell (1973). The underlying framework for most hierarchical marketing models is consumer information processing. Consumer information processing is often sequential, in which one, internal psychological process is a necessary precursor for the next higher order psychological process. Within the advertising literature, Percy and Elliot (2005) summarized the brand communication process as having four stages: Category need, brand awareness, brand attitude and brand purchase intent. Percy and Elliott's (2005) work takes as its starting point McGuire's (1969) work on attitude change. McGuire (1969) posits six behavioral steps through which any persuasive message must pass if it is to effect attitudinal change. Percy and Elliott simplify McGuire's model by reducing the number of information processing steps to four. More importantly for this research, they developed their model from the perspective of the practising brand communications manager. Their focus was to develop a practical framework that brand communication managers could use to effectively evaluate and design persuasive advertising.

For the research presented here, Ozsomer and Altaras (2008) provide an important conceptual model for understanding how global brand attitudes lead to the likelihood of global brand purchase intent. Ozsomer and Altaras (2008) present a conceptually dense model. It triangulates three theoretical streams in consumer behavior: consumer culture theory, signaling theory, and the associative network memory model. Their final conceptual model contains 10 discrete categories that include global brand authenticity, global brand cultural capital, perceived brand global-

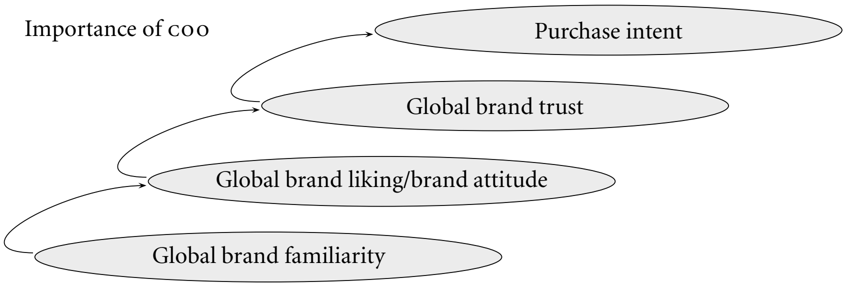

FIGURE 1 Hierarchical model of familiarity-liking-trust-purchase intent

ness, consumer self-construal, perceived cosmopolitanness, global brand quality and global brand social responsibility – to name only some of the constructs. The model's great strength is its ability to integrate significant portions of the extensive research on global brands. The model has two, significant limitations. First, the model provides limited guidance to the practicing global brand manager. The model, while conceptually dense, is too complex for the global brand manager to be pragmatically useful on a day-to-day basis. Second, the model is generic. It does not include brand names and thus sidesteps one of the key issues for the global brand manager: That consumers make brand purchase decisions based on the brand itself and not on more abstract, generic product categories.

The model used in this research aims to overcome these two limitations. By reducing the number of concepts tested to five, the model simplifies Ozsomer and Altaras's (2008) framework. The model used here parallels Percy and Elliot's (2005) research in its attempt to focus on a small number of brand concepts that the practising brand manager can understand and use in crafting competitive brand strategy. By using specific brand names, this research gives both the global brand managers and academic marketing researchers insights into consumer decision making at the most granular level possible: the brand. For the global brand manager, knowing whether consumer decision making converges or diverges across countries can be especially helpful. Figure 1 presents the hierarchical model.

Country of origin. Inevitably, country of origin (COO) is built into every global brand. While consumers may consider COO extrinsic in their decision making, global brand managers must consider COO as an intrinsic characteristic. In a global marketing context, it is important to know the influence of COO on global brand purchase decisions. Hence our decision to include it in our model (see figure 1).

Country of origin has been extensively studied and, in the judgment of Ahmed and d'Astous (2008), is 'now a mature research topic' (p. 79). When Pharr (2005) conducted her extensive literature review, the COO literature had well over 700 studies. Country of origin has been researched in terms of brand image, brand name, consumer levels of involvement, country stereotypes, quality/price relationships. Marketing scholars have variously tried to understand how COO affects perceived product value (Cervino, Sanchez and Cubillo 2005; Hui and Zhou 2002); brand image and brand equity (Lin and Kao 2004; Pappu, Quester and Cooksey 2006). COO has been studied in the context of several emerging markets (Bilkey and Nes 1982; Speece and Nguyen 2005).

If consumers use COO in their decision making, then knowing the accuracy of those perceptions becomes important. Research on the accuracy of consumer COO attribution found that (a) consumers varied in their accurate recognition of a brand's true country of origin, and (b) respondents inferred country of origin by associating the brand name with a language thought to be representative of a specific country (Samiee, Shimp and Sharma 2005). Follow-up research found that university students in the United States frequently inaccurately identified the COO for well-known brands (Anderson Analytics 2007). For example, 53% of the sample thought Nokia to be a Japanese company rather than a Finnish one, and 48% of respondents identified Adidas' COO as the United States as opposed to Germany (Weiss 2007).

Brand familiarity. Our model hypothesizes that global brand familiarity is a foundational activity. Consumers must have some understanding, recognition or knowledge of the global brand before they can proceed to the higher order stages of liking, trusting and ultimately purchasing the global brand. This hypothesis conforms to existing research. Heckler and Childers (1992), Kent and Allen (1994) and Low and Lamb (2000) have all found that consumers who are familiar with a brand have more elaborate, sophisticated brand schemas stored in memory than consumers who are unfamiliar with the brand. Research also has demonstrated that brand familiarity yields more favorable brand evaluation (Janiszewski 1993; Holden and Vanhuele 1999). Increased brand familiarity means that consumers will process advertising messages quicker and with less effort because they already 'know things' about the brand (Chattopadhyay 1998). 'Brands with higher levels of familiarity generally enjoy higher levels of preference among customers' (Lee and Lee 2007, 2). Global brand familiarity leads to global brand liking.

Brand Liking. De Houwer (2008) has stated, 'A core assumption in marketing research is that consumers tend to buy brands and products that they like' (p. 151). While intuitively attractive, brand liking is an underdeveloped area of market research. Few rigorous studies of the construct exist. Hence, definitional clarity is also limited. Boutie (1994) points the way with the following: Brand liking 'seeks to build consumers' positive attitude toward a brand based on the belief that it cares about them (or addresses them) as individuals' (p. 4). In part, our research attempts to validate the role of global brand liking in the consumer's global brand decision making process and hence to confirm or disconfirm its importance in leading to global brand purchase intent.

Brand Trust. In contrast to brand liking, brand trust is a well-researched marketing construct. Delgado-Ballester, Munuera-Aleman, and Yague-Guillen (2003) define brand trust as 'the confident expectations of the brand's reliability and intentions in situations entailing risk to the consumer' (p. 37). As such, brand trust is one, logical outcome of brand familiarity and brand liking. Hence global brand familiarity and global brand are necessary preconditions for global brand trust. It seems unlikely that global brand trust could be built if consumers were unfamiliar with or disliked the global brand. Delgado-Ballester and Munuera-Aleman (2001) underline the central role of brand trust as a variable that generates customer commitment and purchase. Researchers have also linked brand trust with brand loyalty (Lau and Lee 1999), increased market share and advertising efficiency (Chatterjee and Chaudhuri 2005) as well as brand equity (Ambler 1997).

Recently, Romaniuk and Bogomolova (2005) have studied whether global brands varied in terms of trust. They sampled consumers living in the United Kingdom and Australia and controlled for brand size effects in the trust scores of 110 local brands in 13 markets. They found little variation in brand trust scores when controlling for market share. Romaniuk and Bogomolova (2005) concluded that 'trust is more like a "hygiene" factor in that all brands have to have a certain level of trust to be competitive in the market' (p. 371). This finding makes sense given the market similarities of the United Kingdom and Australia. It is worth wondering, though, whether a similar convergence of global brand trust exists in consumers from countries in substantially different stages of economic development, such as Hungary and Bulgaria. Our research was, in part, an attempt to find out.

Purchase Intent. Brand purchase intent is the highest construct in our model (see figure 1) and supports the common marketing focus on sales. Extensive consumer research exists that confirms that asking consumers about their behavioral intentions is a stronger predictor of actual behavior than directly asking consumers whether they will or will not buy a product or service. Rossiter and Percy (1997) define brand purchase intent as the 'buyer's "self-instruction" to purchase the brand, or take purchase-related action' (p. 126). Our research hypothesizes that purchase intent for global brands is developed after consumers have accumulated information about the brand (i. e., they are familiar with the global brand), and after they have developed positive attitudes (liking) towards and trust in the global brand. Global brand purchase intent, being the highest level construct, is one outcome predicated by the preceding processes.

Research Objectives and Methodology

This research had two objectives: (1) To test the predictive power of the hierarchical model global brand purchase intent (see figure 1), and (2) To determine whether consumers in Hungary and Bulgaria, when presented with the same set of 20 global brands, differed in their familiarity with, liking of and trust in these global brands. The global brands chosen were: Adidas, Dannon, Gucci, H&M, Haier, Hyundai, IKEA, Kappa, L'Oréal, Lenovo, LG, Motorola, Nivea, Nokia, Panasonic, Phillips, Puma, Samsung, Sony, and Vodafone. This constellation of brands was chosen to include a variety of different categories of interest: high involvement versus low involvement products; durable versus fast moving consumer goods; retail and consumer electronics brands; and brands that were outside Central, Eastern and Southeastern Europe. Both Haier and Lenovo are Chinese brands. Further, we wanted to include a few brands underrepresented in the global marketing literature to date. Hence: H&M, L'Oréal, Kappa, Nivea and Vodafone. The research was conducted in Hungary and Bulgaria from the middle of 2008 through the beginning of 2009.

The questionnaire was straightforward. All 20 brands were presented to each respondent. Respondents had one open ended question at the survey's beginning. They were asked to write-in their perceived country of origin for each global brand. Respondents were next asked to rate each global brand in terms of their familiarity with, liking of, trust in it, and the likelihood of purchase if the respondent were able to do so. Seven-point Likert scales were used for all constructs. Thus, the scale for global

TABLE 1 Sample Characteristics

Demographic	Bulgarian		Hungarian	
	Frequency	Percentage	Frequency	Percentage
Gender				
Male	40.8	53	47.8	97
Female	59.2	77	52.2	106
Age				
16–20	28.5	37	15.3	31
21–25	30.0	39	44.3	90
26–30	16.9	22	16.3	33
31–35	12.3	16	8.4	17
36–45	9.2	12	7.4	15
Over 46	3.1	4	8.4	17
Education				
High school/some college	41.9	49	71.0	132
Completed University	31.6	37	18.3	34
Graduate work	26.5	31	10.8	20

NOTES Bulgarian $n = 130$ Hungarian $n = 203$. For education, Bulgarian $n = 117$ and for Hungarian $n = 186$ as not all respondents answered the question.

brand familiarity ranged from 'not at all familiar' to 'very familiar' on a 7-point scale. Liking the global brand ranged from 'like nothing about the brand' to 'like everything about the brand' on a 7-point scale. Global brand trust was scaled 'no trust at all' to 'total trust.' Likelihood to purchase was assessed on 7-point scale that ranged from 'never purchase' to 'always purchase' – 'if you were able.' Respondents were asked the importance of knowing the global brand's country of origin as part of their purchase decisions. They responded by using a 7-point scale from 'not important at all' to 'very important.' Basic demographic information (age, gender, highest level of education) was also collected. The questionnaire was pre-tested and was found to be reliable. The questionnaire was electronically posted on an online survey website. This was done to facilitate both data collection and data analysis. Respondents, however, were recruited using local universities and personal relationships in both countries. Budapest and Sofia served as the locations for recruiting respondents. In each respective country, bachelor, master, postgraduate and PhD level students completed the questionnaire. Table 1 presents the sample characteristics.

The Bulgarian sample was almost 60% female, while the Hungarian sample was 52% female. The age distribution between the two groups had a higher representation of 21–25 year-olds from Hungary, while the sample of Bulgarian respondents had a higher representation of 16–20 year-olds. However, if the first two age categories are combined (to make a composite 16–25 age cohort), the samples become quite similar. A much greater percentage of Bulgarian respondents had completed university (31.6%) compared to only 18.3% of the Hungarian respondents.

Country of Origin Accuracy

We begin with country of origin accuracy because we hypothesize it as a possible antecedent independent variable that could influence global brand purchase intent overall. Table 2 presents the COO recognition accuracy of the two samples.

In terms of being able to correctly identify the COO of the twenty brands in the questionnaire, the Bulgarian respondents were more accurate than the Hungarian respondents for 10 brands, 50% (see table 2). Those brands were: H&M, Haier, Lenovo, LG, Motorola, Nivea, Panasonic, Phillips, Samsung, and Vodafone. The Hungarian respondents were more accurate for two brands (10%). They were IKEA and Nokia. There were no differences between the two groups for eight brands (40%), Adidas, Dannon, Gucci, Hyundai, Kappa, L'Oréal, Puma, and Sony.

Global Brand Differences

We next turn to the mean score comparisons between Bulgarian and Hungarian respondents on global brand familiarity, global brand liking, global brand trust, global brand purchase intent and the relative importance of knowing the global brand's COO. Table 3 presents the striking difference between Bulgarian consumers and Hungarian consumers in terms of global brand familiarity.

The Bulgarian respondents indicated a greater familiarity with 19 of the 20 global brands tested. Hungarian respondents had greater familiarity with only one brand, IKEA (see table 3). No differences were found for three brands: Dannon, H&M, and Vodafone. Nokia was almost universally known by every Bulgarian respondent (mean score = 6.74); and while Nokia was also the most familiar brand for Hungarian respondents, it was significantly less familiar to the Hungarian sample than for Bulgarians.

Bulgarians consumers indicated a greater liking for thirteen brands: Adidas, Gucci, Haier, Hyundai, Kappa, L'Oréal, LG, Motorola, Nokia,

TABLE 2 COO recognition accuracy

(1)	(2)	(3)	(4)
Adidas	57.7	63.8	.26
Dannon	56.2	57.9	.29
Gucci	80.0	84.5	.50
H&M	16.2	3.9	.00
Haier	38.5	2.5	.00
Hyundai	53.1	54.7	.77
IKEA	36.9	58.6	.00
Kappa	51.5	45.9	.33
L'Oréal	83.1	90.0	.06
Lenovo	21.7	7.4	.00
LG	36.9	15.8	.00
Motorola	53.5	39.5	.00
Nivea	60.8	0	.01
Nokia	44.6	58.4	.01
Panasonic	63.1	48.3	.01
Phillips	30.2	26.1	.05
Puma	48.5	48.5	1.00
Samsung	36.4	22.8	.00
Sony	69.2	64.5	.40
Vodafone	53.5	30.0	.00

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians (percent correct recognition of COO), (4) two tail significance. Two tail tests were utilized.

TABLE 3 Global brand familiarity

(1)	(2)	(3)	(4)
Adidas	6.05	5.40	.00
Dannon	5.68	5.38	.10
Gucci	5.15	3.38	.00
H&M	3.68	3.75	.77
Haier	3.33	2.41	.00
Hyundai	4.75	3.93	.00
IKEA	4.08	4.88	.00
Kappa	4.88	3.97	.00
L'Oréal	5.75	4.46	.00
Lenovo	2.96	2.50	.05
LG	5.54	4.73	.00
Motorola	5.50	4.31	.00
Nivea	6.13	5.23	.00
Nokia	6.74	5.59	.00
Panasonic	5.85	4.92	.00
Phillips	5.76	4.99	.00
Puma	5.76	4.99	.00
Samsung	6.04	5.25	.00
Sony	6.16	5.16	.00
Vodafone	4.99	4.73	.23

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians, (4) significance. A univariate ANOVA was used to assess the significance between means. Items were on a 7-point scale, with 1 being 'not familiar at all' and 7 being 'very familiar.'

Panasonic, Phillips, Puma, and Sony (see table 4). There were no differences in liking scores for seven brands: Dannon, H&M, IKEA, Lenovo, Nivea, Samsung, and Vodafone.

For global brand trust, Bulgarians trusted more brands than the Hungarians: Adidas, Gucci, Kappa, L'Oréal, LG, Nokia, Panasonic, Puma, and Sony. For the other 11 brands there were no differences between the two countries.

In terms of likelihood of brand purchase, Bulgarian respondents were

TABLE 4 Global brand liking

(1)	(2)	(3)	(4)
Adidas	5.83	5.29	.00
Dannon	4.82	4.84	.92
Gucci	5.23	3.99	.00
H&M	4.31	4.17	.55
Haier	4.18	3.39	.00
Hyundai	4.27	3.67	.00
IKEA	4.48	4.75	.20
Kappa	4.68	4.08	.00
L'Oréal	5.37	4.84	.00
Lenovo	4.38	4.03	.20
LG	4.91	4.52	.03
Motorola	4.34	3.88	.01
Nivea	5.50	5.23	.13
Nokia	6.23	5.49	.00
Panasonic	5.52	4.73	.00
Phillips	5.28	4.89	.02
Puma	5.63	5.15	.00
Samsung	5.31	5.10	.22
Sony	5.79	5.21	.00
Vodafone	4.47	4.24	.31

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians, (4) significance. A univariate ANOVA was used to assess the significance between means. Items were on a 7-point scale, with 1 being 'like nothing about the brand' and 7 being 'like everything about the brand.'

TABLE 5 Global brand trust

(1)	(2)	(3)	(4)
Adidas	6.10	5.57	.00
Dannon	4.79	5.04	.21
Gucci	5.45	4.61	.00
H&M	4.45	4.41	.87
Haier	4.03	3.83	.42
Hyundai	4.37	4.04	.08
IKEA	4.57	4.81	.26
Kappa	4.96	4.35	.00
L'Oréal	5.48	5.11	.04
Lenovo	3.92	4.03	.70
LG	5.09	4.59	.00
Motorola	4.39	4.14	.19
Nivea	5.64	5.41	.17
Nokia	6.39	5.70	.00
Panasonic	5.56	5.07	.00
Phillips	5.39	5.14	.14
Puma	5.60	5.24	.03
Samsung	5.43	5.25	.30
Sony	5.89	5.43	.00
Vodafone	4.70	4.45	.23

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians, (4) significance. A univariate ANOVA was used to assess the significance between means. Items were on a 7-point scale, with 1 being 'no trust at all' and 7 being 'total trust.'

more likely to purchase thirteen brands: Adidas, Gucci, Haier, Hyundai, Kappa, L'Oréal, LG, Nokia, Panasonic, Phillips, Puma, Sony, and Vodafone (see table 6). There were no differences between Bulgarians and Hungarians for seven brands: Dannon, H&M, IKEA, Lenovo, Motorola, Nivea, and Samsung.

Lastly, we present the importance of knowing the global brand's country of origin. Table 7 indicates that Bulgarian consumers scored higher

TABLE 6 Likelihood of global brand purchase

(1)	(2)	(3)	(4)
Adidas	5.96	5.27	.00
Dannon	5.08	4.99	.66
Gucci	5.47	4.31	.00
H&M	4.58	4.15	.06
Haier	4.14	3.43	.01
Hyundai	4.24	3.42	.00
IKEA	4.44	4.74	.15
Kappa	4.85	4.05	.00
L'Oréal	5.53	4.98	.00
Lenovo	4.10	4.01	.73
LG	4.80	4.43	.04
Motorola	4.01	3.68	.10
Nivea	5.46	5.23	.17
Nokia	6.32	5.42	.00
Panasonic	5.26	4.78	.00
Phillips	5.27	4.87	.01
Puma	5.55	5.15	.02
Samsung	5.33	5.10	.18
Sony	5.84	5.22	.00
Vodafone	4.47	3.97	.03

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians, (4) significance. A univariate ANOVA was used to assess the significance between means. Items were on a 7-point scale, with 1 being 'never purchase' and 7 being 'always purchase.'

TABLE 7 Knowing the global brand's COO

(1)	(2)	(3)	(4)
Adidas	4.79	3.45	.00
Dannon	4.41	3.45	.00
Gucci	4.46	3.45	.00
H&M	3.55	3.45	.74
Haier	3.37	3.45	.78
Hyundai	4.22	3.44	.01
IKEA	3.81	3.46	.26
Kappa	4.08	3.44	.04
L'Oréal	4.78	3.44	.00
Lenovo	3.17	3.45	.36
LG	4.05	3.61	.13
Motorola	3.94	3.60	.25
Nivea	4.54	3.61	.00
Nokia	4.78	3.62	.00
Panasonic	4.36	3.61	.01
Phillips	4.31	3.61	.02
Puma	4.46	3.61	.00
Samsung	4.36	3.62	.01
Sony	4.58	3.61	.01
Vodafone	3.76	3.61	.60

NOTES Column headings are as follows: (1) brand, (2) Bulgarians, (3) Hungarians, (4) significance. A univariate ANOVA was used to assess the significance between means. Items were on a 7-point scale, with 1 being 'not at all important' and 7 being 'very important.'

in the need to know the COO of a brand for 13 brands: Adidas, Dannon, Gucci, Hyundai, Kappa, L'Oréal, Nivea, Nokia, Panasonic, Phillips, Puma, Samsung, and Sony (see table 7). There were no differences between the groups for seven brands: H&M, Haier, IKEA, Lenovo, LG, Motorola, and Vodafone. What is unknown, though, is to what degree, if any, the constructs of global brand familiarity, global brand liking, and the importance of knowing the global brand's COO are significant predictors of global brand purchase intent. We turn to this broader issue next.

Predictive Ability of the Hierarchical Model

Separate stepwise multiple regressions were run for Bulgarian and Hungarian respondents for the twelve brands that were used in the study (see tables 8 and 9). The dependent variable was likelihood of purchase of the brand while the independent variables included: (1) age (constructed as a dummy variable), (2) education (constructed as a dummy variable), (3) gender (constructed as a dummy variable), (4) familiarity with the brand, (5) degree of trust in the brand, and (6) degree of liking the brand. The dummy variable for gender was assigned two variables, male and female. The dummy variable for education was divided into three variables, high school/some college, completed University, and graduate work. For age there were six variables, 16 to 20 years, 21 to 25 years, 26 to 30 years, 31 to 35 years, 36 to 45 years, and over 46 years.

The VIF was calculated for all significant variables in the Bulgarian and Hungarian regression models. There was no VIF above 3.0 across all the models. 'As a rule of thumb, if the VIF of a variable exceeds 10 that variable is said to be highly collinear' (Gujarati and Porter 2009). Thus none of the variables indicated any collinearity issues.

For Bulgarian respondents, 'liking' was the most important variable for 14 of the 20 brands analyzed (see table 8). Adidas, Lenovo, Nivea, Nokia, Puma, and Sony were the exceptions. Trust was the most important predictor for these brands. Overall trust was a significant independent variable for 18 brands. Familiarity was significant for just 2 brands, H&M and Panasonic. Knowing the COO of the brand was found as a significant independent for 12 brands which included Adidas, Gucci, Haier, Hyundai, IKEA, Motorola, Nivea, Panasonic, Phillips, Puma, Sony, and Vodafone. Demographics played a limited role in predicting the likelihood of purchase in all the models:

- Those aged 26–30 years were more likely to purchase Haier than those over 46 years.
- Those aged 21–25 were less likely to purchase Kappa than those over 46 years.
- Those aged 36–45 years were less likely to purchase Puma than those over 46 years.

TABLE 8 Bulgarian respondent regressions (familiarity, trust, liking, importance of COO, age, education, and gender regressed against likelihood to buy)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Adidas	50.8	.00	.773	.585	Trust	4.5	.00	.415	2.0
					Liking	3.8	.00	.341	2.0
					COO	2.3	.02	.158	1.1
Dannon	209.2	.00	.837	.694	Liking	6.2	.00	.599	3.0
					Trust	2.8	.00	.271	3.0
Gucci	34.1	.00	.715	.496	Liking	4.4	.00	.376	1.4
					Trust	4.3	.00	.355	1.3
					COO	2.2	.02	.173	1.1
H&M	54.6	.00	.772	.585	Liking	6.3	.00	.587	1.5
					Familiarity	2.8	.00	.261	1.5
Haier	30.2	.00	.771	.575	Liking	6.0	.00	.549	1.2
					COO	3.1	.00	.283	1.2
					26–30 years	2.7	.00	.234	1.0
Hyundai	19.7	.00	.624	.369	Liking	3.3	.00	.325	1.4
					Trust	3.1	.00	.307	1.4
					COO	2.8	.00	.237	1.0
IKEA	36.9	.00	.818	.652	Liking	4.9	.00	.524	2.3
					Trust	2.7	.00	.289	2.3
					College	–2.5	.01	–.176	1.0
					COO	2.1	.03	.157	1.0
Kappa	35.3	.00	.738	.529	Liking	4.5	.00	.426	1.7
					Trust	3.9	.00	.364	1.7
					21–25 years	–2.1	.03	–.151	1.0
L'Oréal	48.7	.00	.777	.591	Liking	6.2	.00	.569	2.0
					Trust	2.3	.02	.210	2.0
					Male	–2.1	.03	–.144	1.0
Lenovo	32.1	.00	.581	.327	Trust	5.6	.00	.581	1.0

Continued on the next page

- Those aged 36–45 years were more likely to purchase Samsung than those over 46 years.
- Those aged 16–20 years were more likely to purchase Vodafone than those of 46 years and older.

Education was only a significant predictor for IKEA, with those having completed the University being less likely to purchase than those with a masters/doctorate degree. Gender was only significant for L'Oréal with, men being less likely to purchase than women.

TABLE 8 *Continued from the previous page*

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LG	73.6	.00	.764	.576	Liking	6.1	.00	.497	1.6
					Trust	4.2	.00	.346	1.6
Motorola	33.8	.00	.704	.482	Liking	3.8	.00	.365	1.8
					Trust	3.4	.00	.333	1.9
					COO	2.5	.01	.182	1.0
Nivea	30.3	.00	.694	.466	Trust	3.2	.00	.343	2.0
					Liking	2.9	.00	.310	2.0
					COO	2.9	.00	.219	1.0
Nokia	40.7	.00	.674	.443	Trust	4.0	.00	.420	1.9
					Liking	2.9	.00	.310	1.9
Panasonic	20.1	.00	.666	.422	Liking	3.3	.00	.341	1.8
					Trust	1.8	.05	.190	1.9
					COO	2.1	.03	.167	1.3
					Familiarity	2.1	.03	.184	1.3
Phillips	40.0	.00	.735	.527	Liking	4.0	.00	.369	1.8
					COO	3.9	.00	.274	1.0
					Trust	3.4	.00	.318	1.8
Puma	46.7	.00	.775	.588	Trust	9.6	.00	.697	1.2
					COO	2.3	.02	.167	1.2
					36–45 years	2.2	.02	.154	1.0
Samsung	68.9	.00	.818	.660	Liking	5.1	.00	.587	1.9
					Trust	5.7	.04	.457	1.9
					36–45 years	2.5	.01	.147	1.0
Sony	32.2	.00	.698	.472	Trust	3.8	.00	.422	2.4
					COO	2.9	.00	.214	1.0
					Liking	2.2	.02	.246	2.3
Vodafone	27.1	.00	.730	.513	Liking	3.2	.00	.340	2.2
					Trust	3.1	.00	.318	2.1
					16–20 years	2.9	.00	.210	1.0
					COO	2.4	.01	.196	1.2

NOTES Column headings are as follows: (1) model/brand; model summary: (2) F, (3) sig., (4) R, (5) adj. R^2; coefficients (standardized betas): (6) variable(s), (7) t, (8) sig., (9) weight; (10) VIF.

For Hungarian respondents, liking was the most important predictor for 18 of the brands. The only exceptions were Dannon and Lenovo (see table 9). Trust was a significant independent variable for 16 brands. The exceptions were Gucci, Nokia, Phillips, and Sony. Familiarity was important for only two brands, Gucci and Kappa. Knowing the COO of the brand was a significant predictor only for L'Oréal.

TABLE 9 Hungarian Respondent Regressions (familiarity, trust, liking, importance of COO, age, education, and gender regressed against likelihood to buy)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Adidas	79.2	.00	.683	.461	Liking	7.5	.00	.488	1.4
					Trust	4.3	.00	.281	1.4
Dannon	118.9	.00	.737	.539	Trust	6.9	.00	.437	1.7
					Liking	5.9	.00	.373	1.7
Gucci	22.1	.00	.426	.173	Liking	4.3	.00	.308	1.2
					Familiarity	2.7	.00	.192	1.2
H&M	68.7	.00	.714	.502	Liking	7.6	.00	.499	1.7
					Trust	3.5	.00	.232	1.7
					Male	–2.8	.00	–.146	1.0
Haier	55.4	.00	.597	.350	Liking	4.8	.00	.373	1.8
					Trust	3.5	.00	.277	1.8
Hyundai	39.8	.00	.613	.366	Liking	6.4	.00	.445	1.5
					Trust	3.0	.00	.213	1.5
					Male	–2.7	.00	–.152	1.0
IKEA	49.0	.00	.652	.416	Liking	3.9	.00	.317	2.2
					Familiarity	3.8	.00	.298	2.0
					Trust	2.1	.02	.139	1.3
Kappa	57.3	.00	.703	.485	Liking	7.3	.00	.575.	1.7
					Trust	3.2	.00	.243	1.7
					Familiarity	–1.9	.04	–.127	1.0
L'Oréal	29.8	.00	.657	.417	Liking	5.6	.00	.385	1.6
					Trust	3.3	.00	.232	1.6
					16–20 years	2.7	.00	.151	1.0
					Male	–3.0	.00	–.177	1.1
					COO	2.2	.02	.122	1.0
Lenovo	61.6	.00	.760	.569	Trust	4.7	.00	.499	1.6
					Liking	2.9	.00	.401	1.6

Continued on the next page

Reviewing the demographics for the Hungarian group, men were less likely to buy H&M, Hyundai, and L'Oréal than women. H&M and L'Oréal are easy to understand as they are women's fashion items while Hyundai is more difficult to interpret.

There were only two significant education situations; those who had completed the University were less likely to buy Nivea than those who had completed some graduate work, while those who were in the category of completed high school/some college were more likely to purchase Puma. The 16–20 year-olds were more likely to buy L'Oreal and Sony that

TABLE 9 *Continued from the previous page*

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LG	93.0	.00	.696	.479	Liking	8.0	.00	.543	1.5
					Trust	3.6	.00	.243	1.5
Motorola	40.3	.00	.645	.406	Liking	6.4	.00	.470	1.4
					Trust	2.8	.00	.205	1.0
					36–45 years	2.0	.00	.122	1.4
Nivea	53.1	.00	.696	.475	Liking	5.1	.00	.386	2.0
					Trust	4.9	.00	.380	1.0
					(1)	–2.0	.04	–.113	1.4
Nokia	113.4	.00	.750	.557	Liking	14.5	.00	.727	1.1
					26–30 years	–2.6	.00	–.133	1.0
Panasonic	53.3	.00	.696	.476	Liking	6.5	.00	.453	1.6
					Trust	4.3	.00	.300	1.6
					Importance	2.0	.03	.115	1.0
Phillips	99.1	.00	.596	.352	Liking	9.9	.00	.596	1.0
Puma	45.3	.00	.665	.432	Liking	6.9	.00	.501	1.5
					Trust	2.7	.00	.200	1.4
					(2)	2.3	.00	.136	1.0
Samsung	71.5	.00	.674	.448	Liking	9.1	.00	.585	1.2
					Trust	2.4	.01	.157	1.2
Sony	73.1	.00	.745	.547	Liking	10.4	.00	.632	1.4
					Importance	2.6	.00	.163	1.4
					16–20 years	2.0	.04	.104	1.0
Vodafone	118.6	.00	.766	.582	Liking	7.7	.00	.543	1.9
					Trust	3.9	.00	.280	1.9

NOTES Column headings are as follows: (1) model/brand; model summary: (2) *F*, (3) sig., (4) *R*, (5) adj. R^2; coefficients (standardized betas): (6) variable(s), (7) *t*, (8) sig., (9) weight; (10) VIF.

those over 46. The only other age variable than was significant was that 26–30 year-olds were less likely to buy Nokia.

Analysis and Conclusions

Overall, this hierarchical model does a good job of predicting purchase intent for most of the global brands. The adjusted coefficient of determination for the Bulgarian sample ranged from .694 (Dannon) to .327 (Lenovo). Similarly, the adjusted coefficient of determinations for the Hungarian sample ranged from .569 (Lenovo) to .173 (Gucci). An examination of the adjusted coefficient of determinations also indicated that there was no overfitting of the models (Hair et al. 2006, 216). Using the rule of thumb that R^2s should be greater than .25 to be considered having reasonable predictive power, all the models are reasonably robust.

Liking and trust were the important predictors for both Bulgarian and Hungarian respondents. For the Hungarians, liking was the most heavily weighted predictor for 19 of the 20 global brands, while trust was the second most important predictor for 13 of the brands. The standardized coefficients ranged from .727 for Nokia to .308 for Gucci. All coefficients were significant at $p \leq .01$.

For Bulgarian respondents, liking was the most important predictor for 14 brands, while trust was the most important predictor for 6 brands. Trust was the second most important predictor for 11 of the global brands. The 14 liking coefficients ranged from .599 for Dannon to .325 for Hyundai. For trust the 6 coefficients ranged from .697 for Puma to .343 for Nivea. All standardized coefficients for liking and trust for the Bulgarian sample were significant at $p \leq .05$.

Familiarity with the brand was unimportant for both groups across, with a few exceptions. To borrow from Romaniuk and Bogomolova (2005) quoted above, perhaps global brand familiarity operates as a hygiene factor. All global brands must attain a certain level of familiarity for active consideration; otherwise they fall out of consumers' evoked sets. Familiarity may function more simply. Rather than being a truly continuous variable, familiarity may operate dichotomously. Either a consumer is or is not familiar with the global brand.

Thus liking and trust were the most important predictors for both countries. Liking, or attitudes, have long been established as an important predictor of purchase behavior. It is not surprising that brand trust was also an important independent variable. Trust is confidence concerning a brand's reliability and integrity (Morgan and Hunt 1994) and can also be seen by consumers as a way to moderate risk in the buying process (Anderson and Narus 1990). It is confidence in the face of risk (Lewis and Weigert 1985). Given the uncertain times of the world recession, trust in a brand can help to reduce even greater marketplace uncertainty.

The logic of this assertion was borne out in a recent JWT study on consumer anxiety (JWT 2009). JWT noted that the economic crisis increased consumers' anxiety considerably. Events outside consumers' direct control had devastating, direct effects on consumer purchase behavior. In Hungary and Bulgaria, where the crisis had a disproportionally negative effect compared to other Central and Eastern European countries, consumers not only curtailed purchases but also became much more cautious in their spending. The JWT study noted, 'The anxious are planning their purchasing behavior around where and when they can get the best deals and exercising greater restraint' (p. 5). It is reasonable to presume that brand liking and brand trust become more salient in decision making when budgets are tight. Gaining 'the best deals,' as the JWT study suggests, may mean a more rational approach to decision making.

Trust played a more significant role for Bulgarian consumers than for Hungarians. The Bulgarian consumers seemed to need/have more information about brands than did their Hungarian counterparts. Bulgarian respondents were far more familiar with the global brands in the study. They felt it was more important to know about the COO of brands and indeed were more knowledgeable of the COO of the 20 brands in the study.

For Bulgarian consumers, whose GDP per capita was $12,700 (CIA World Factbook 2009a) as compared to Hungarians whose GDP per capita was $19,800 (CIA World Factbook 2009b), trust may be a more important precursor of purchase factor, because limited incomes create a greater perceived risk that mistakes could cause major damage to the family budget. Add in a major recession, and family income may seem even more fragile.

Recent trade figures indicate substantial increases in Chinese imports into Bulgaria (Messerling and Wang 2008). It is reasonable to hypothesize that counterfeit and shoddily-made Chinese products make Bulgarians careful, cautious consumers. Thus trusting the global brand name provides a degree of security for the Bulgarian consumer.

Global brand managers would do well to stress relationship marketing tactics that either reinforce or highlight brand trust. L'Observatoire Cetelem, a French consumer behavior research firm that regularly tracks consumer behavior in six Western European countries (Germany, Belgium, Spain, France, Italy, Portugal) and seven Central and Eastern European countries (Hungary, Czech Republic, Serbia, Slovakia, Poland, and Russia), said that: '[The] global crisis has encouraged rational consumer behavior of Europeans and has speeded up changes in spending patterns: more prudent and balanced spendings' (L'Observeratoire Cetelem, 2010). Liking and trust become competitive advantages in situations where consumers will want to purchase solely on price. This situation may create tension within consumers. On the one hand, purchases are more planned and careful. On the other, brand managers may want to provide target markets with reasons not to buy strictly on price. Stressing the relational and emotional connections between consumer and brand may be a productive strategy here.

This study has several limitations. While every effort was made to recruit a representation sample in both Hungary and Bulgaria, Table 1 suggests that the sample might not be as representative of each country's population as desired. Further research should be conducted to select a sample more representative of each respective country. This is especially important since respondents completed the survey online. Access to the Internet is not evenly distributed across the entire population, thus leading to some selection bias. Second, every brand tested in this research serves as both a corporate and a product brand. Follow-up research should be conducted to untangle the halo effect that the corporate brand might have from the specific product brand. Third, the study explores consumer decision making in only Central and Eastern Europe countries. Research should be done to confirm or disconfirm findings in other Central European countries, such as Poland, Estonia and/or Albania.

Overall, there are some significant differences between Bulgarian and Hungarian consumers regarding the relative influence of global brand familiarity, global brand liking and global brand trust in purchase intent. As Central and Eastern European countries continue to provide global corporations and their brands with market opportunities, further study of within-Europe comparisons are needed.

References

Aaker, D. A. 1991. *Managing Brand Equity.* New York: The Free Press.

Ahmed, S., and A. d'Astous. 2008. 'Antecedents, Moderators and Dimensions of Country-of-Origin Evaluations.' *International Marketing Review* 25 (1): 75–106.

Ambler, T. 1997. 'How Much of Brand Equity Is Explained by Trust?' *Management Decision* 35 (4): 283–292.

Anderson Analytics. 2007. 'Brands and Countries.' Http://www.andersonanalytics.com/reports/BrandAndCountries.pdf.

Anderson, J. C., and A. Narus. 1990. 'A Model of Distributor Firm and Manufacturer Firm Working Partnership.' *Journal of Marketing* 54 (1): 42–58.

Bilkey, W., and E. Nes. 1982. 'Country of Origin Effects on Product Evaluation.' *Journal of International Business Studies* 8 (1): 89–99.

Boutie, P. 1994. 'Who Will Save The Brands?' *Communication World* 11 (7): 24–9.

Cervino, J., J. Sanchez, and J. Cubillo. 2005. 'Made in Effect: Competitive Marketing Strategy and Brand Performance; An Empirical Analysis for Spanish Brands.' *Journal of American Academy of Business* 6 (2): 237–44.

Chatterjee, S., and A. Chaudhuri. 2005. 'Are Trusted Brands Important?' *Marketing Management Journal* 15 (1): 1–16.

Chattopadhyay, A. 1998. 'When Does Comparative Advertising Influence Brand Attitude? The Role of Delay and Market Position.' *Psychology & Marketing* 15 (5): 461–75.

CIA World Factbook. 2009a. *Bulgaria Economy Overview.* https://www.cia.gov/library/publications/the-world-factbook/geos/bu.html

———. 2009b. Hungary Economy Overview. https://www.cia.gov/library/publications/the-world-factbook/geos/hu.html

de Houwer, J. 2008. 'Conditioning as a Source of Liking: There Is Nothing Simple About It.' In *Social Psychology of Consumer Behavior,* edited by M. Wanke, 151–66. New York: Psychological Press.

Delgado-Ballester, E., and J. L. Munuera-Aleman. 2001. 'Brand Trust in The Context of Consumer Loyalty.' *European Journal of Marketing* 35 (11–2): 1238–58.

Delgado-Ballester, E., J. L. Munera-Alemain, and M. Yague-Gullien. 2003. 'Development and Validation of a Brand Trust Scale.' *International Journal of Market Research* 45 (1): 35–53.

Dimofte, D., J. Johansson, and R. Bagozzi. 2010. 'Global Brands in the United States: How Consumer Ethnicity Mediates the Global Brand Effect.' *Journal of International Marketing* 18 (3): 81–106.

Engel, J., D. Kollat, and R. Blackwell. 1973. *Consumer Behavior.* New York: Holt, Rinehart and Winston.

Ghauri, P., and P. Cateora, P. 2010. *International Marketing.* 3rd ed. London: McGraw Hill.

Gujarati, D., and D. Porter. 2009. *Basic Econometrics.* 5th ed. Boston, MA: McGraw-Hill Irwin.

Hair, J., W. Black, B. Babin, R. Anderson, and R. Tatham. 2006. *Multivariate Data Analysis.* 6th ed. Upper Saddle River, NJ: Prentice Hall.

Heckler, S., and T. Childers. 1992. 'The Role of Expectancy and Relevancy in Memory for Verbal and Visual Information: What Is Incongruency?' *Journal of Consumer Research* 18 (4): 475–92.

Holden, S., and M. Vanhuele. 1999. 'Know the Name, Forget the Exposure: Brand Familiarity Versus Memory of Exposure Context.' *Psychology & Marketing* 16 (6): 479–96.

Hui, M., and L. Zhou. 2002. 'Linking Product Evaluations and Purchase

Intention for Country-of-Origin Effects.' *Journal of Global Marketing* 15 (3–4): 95–101.

Janiszewski, C. 1993. 'Preattentive Mere Exposure Effects.' *Journal of Consumer Research* 20 (3): 376–92.

Johansson, J., and I. Ronkainen, I. 2005. 'The Esteem of Global Brands.' *Brand Management* 12 (5): 39–54.

JWT. 2009. JWT *Anxiety Index Quarterly* 1 (Spring). http://02a6614.netsolhost.com/production/JWT_AnxietyIndex_Quarterly_Spring_2009.pdf

Kearney, A. T. n. d. 'Emerging Market Priorities for Global Retailers.' Http://www.lebensmittelzeitung.net/studien/pdfs/59.pdf.

Kent, R., and C. Allen. 1994. 'Competitive Consumer Interference Effects for Consumer Memory in Advertising: The Role of Brand Familiarity.' *Journal of Marketing* 58: 97–105.

Lau, G., and S. Lee. 1999. 'Consumers' Trust in a Brand and the Link to Brand Loyalty.' *Journal of Market Focused Management* 4 (4): 341–70.

Lavidge, R., and G. Steiner. 1961. 'A Model for Predictive Measurement of Advertising Effectiveness.' *Journal of Marketing* 25:59–62.

Lee, J., and W. Lee. 2007. 'Country of Origin and Brand Familiarity in Consumer Product Evaluation: The Strategic Brand Alliance Perspective.' Paper presented at the American Academy of Advertising 2007 Asia Pacific Conference, Seoul, 30 May–2 June.

Lewis, J. D., and A. Weigert. 1985. 'Trust as a Social Reality.' *Social Forces* 63 (4): 967–85.

Lin, C., and D. Kao. 2004. 'The Impacts of Country-of-Origin on Brand Equity.' *Journal of American Academy of Business* 5 (1–2): 37–40.

L'observertoire Cetelem. 2010. 'Consommer en 2010: Pas Moins, Mais Mieux.' http://www.ccifr.ru/uploaded/Observatoireconso2010_ENG.ppt

Low, G., and C. Lamb. 2000. 'The Measurement and Dimensionality of Brand Associations.' *Journal of Product and Brand Management* 9 (6): 350–68.

McGuire, W. J. 1969. 'The Nature of Attitudes and Attitude Change.' In *The Handbook of Social Psychology,* edited by G. Lindzey and E. Aronson, 3:136–314. Reading, MA: Addison-Wesley.

Messerling, P. and J. Wang. 2008. 'Redesigning the European Union's Trade Policy Strategy Towards China.' Joint ECIPE-GEM Working Paper 4. http://www.gem.sciences-po.fr/content/publications/pdf/Messerlin_wang_EUchina_long_EN20022008.pdf

Morgan, R. M., and S. D. Hunt. 1994. 'The Commitment-Trust Theory of Relationship Marketing.' *Journal of Marketing* 58 (3): 20–38.

Pappu, R., Quester, P. and R. Cooksey. 2006. 'Country Image and Consumer-Based Brand Equity: Relationships and Implications for International Marketing.' *Journal of International Business Studies* 38 (5): 726–45.

Ozsomer, A., and S. Altaras. 2008. 'Global Brand Purchase Likelihood: A Critical Synthesis and an Integrated Conceptual Framework.' *Journal of International Marketing* 16 (4): 1–26.

Percy, L., and R. Elliot. 2005. *Strategic Advertising Management.* 2nd ed. Oxford: Oxford University Press.

Pharr, J. 2005. 'Synthesizing Country-of-Origin Research from the Last Decade: Is the Concept Still Salient in an Era of Global Brands?' *Journal of Marketing: Theory and Practice* 13 (4): 34–45.

Roberts, J. and J. Cayla. 2009. 'Global Branding.' In *The Sage Handbook of International Marketing,* edited by M. Kotabe and K. Helsen, 346–60. Los Angeles: Sage.

Romaniuk, J., and S. Bogomolova. 2005. 'Variation in Brand Trust Scores.' *Journal of Targeting, Measurement and Analysis for Marketing* 13 (4): 363–73.

Rosenbloom, A., and J. Haefner. 2009. 'Country-of-Origin Effects and Global Brand Trust: A First Look.' *Journal of Global Marketing* 22 (4): 267–78.

Rossiter, J., and L. Percy. 1997. *Advertising Communications and Promotion Management.* New York: McGraw-Hill.

Salter, J. 2006. 'From Karl Marx to Trademarks.' http://www.brandchannel.com/brand_speak.asp?bs_id=140

Samiee, S., T. Shimp, and S. Sharma. 2005. 'Brand Origin Recognition Accuracy: Its Antecedents and Consumers' Cognitive Limitations.' *Journal of International Business Studies* 36 (4): 379–97.

Schuh, A., and H. Holzmülle. 2003. 'Marketing Strategies of Western Consumer Goods Firms in Central and Eastern Europe.' In *Change Management in Transition Economies: Integrating Corporate Strategy, Structure and Culture,* edited by H.-J. Stüting, W. Dorow, and C. F. Blazejewski, 176–88. New York: Palgrave Macmillan.

Simoes, C., and S. Dibb. 2001. 'Rethinking the Brand Concept: New Brand Orientation.' *Corporate Communications* 6 (4): 217–24.

Speece, M. and D. Nguyen. 2005. 'Countering Negative Country-of-Origin with Low Prices: A Conjoint Study in Vietnam.' *Journal of Product & Brand Management* 14 (1): 39–48.

Steenkamp, J.-E., R. Batra, and D. Alden. 2003. 'How Perceived Brand Globalness Creates Brand Value.' *Journal of International Business Studies* 34 (1): 53–65.

The World Bank. 2010. Global Crisis Hits Home in Emerging Europe and Central Asia. http://go.worldbank.org/4LI8UHR4P0

Weiss, T. 2007. 'US Students Hold Misbeliefs.' http://www.trendsspotting.com/blog/?p=131

Effectiveness of the Public Work Program in Slovenia

Laura Južnik Rotar

This paper evaluates the direct effects of the Slovenian public work program on the youth. The effectiveness of the program is measured by re-employment probability. A Heckman correction of selection is applied to estimate the average program effects. The Heckman selection estimator is an extensively used method to control for selection on unobserved variables. It relies on the assumption that a specific distribution of the unobservable characteristics jointly influences participation and outcome. The results of the empirical study indicate that the public work program has a positive effect on employment in the short run. In the long run, however, the results are not so obvious.

Key Words: active employment policies, evaluation, Heckman procedure, selection, treatment effects
JEL *Classification:* C50, J38, J68

Introduction

Active employment policies are essentially public interventions in the labor market. For the measures of active employment policies in Slovenia in the year 2008 there was a budget of approximately 98.6m EUR (current prices). Measures of active employment policies are financed from the state budget, and some of these resources are European resources. The most heavily financed are: training programs and programs dealing with social inclusion. Based on scientific methodology, there are few studies on the evaluation of the effectiveness of employment programs in Slovenia. This leads to overestimation of the results and inadequate distribution of resources.

Since it is a well-known fact that unemployment among young people is more sensitive to fluctuations in the business cycle than adult unemployment, we focus our empirical analysis on young unemployed persons. An additional reason is also that the public work program has not yet been evaluated for the youth.

The aim of the empirical analysis is to find out how effective the public work program is on future employment probability. We are interested

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in the future employment probability of young unemployed who participated in the public work program, compared with young unemployed who did not participate in the employment program. Because it is not possible to identify the individual causal effect for inclusion in the employment program, it is necessary to introduce certain assumptions. In the empirical analysis, which is based on a rich database, we use the Heckman procedure. The rest of this paper is organized as follows: Short Overview of Public Work Program, Data and Variables, The Empirical Application, and Conclusion.

Short Overview of Public Work Program

Public work programs are local or state employment programs, which are intended for stimulation of development of new working places or preservation of current ones, or development of working abilities of unemployed people. Public work programs are organised in order to carry out social, educational, cultural, environmental, municipal, agricultural and other programs. Employers or other organizations may not organise public work program for those activities, of which goal is production of profit, or when the presence of the public work program on the market would lead to imperfect competition.

The public work program and number of people participating in the public work program are determined by the Government of the Republic of Slovenia within the frame of the program of measures of active employment policy for the current budgetary period. The public work program can also be accepted by the municipality, if it ensures funds for implementation of the public work program in whole. National employment service, orderers of the public work program, performers of public work program as well as unemployed persons can take part in implementing individual employment programs, whereas their mutual obligations are determined by a contract. Based on a special employment contract, unemployed persons can participate in the public work program. Such a contract is conducted with performers of the public work program. Working relations regulations are being used for the above mentioned contracts. Such regulations cover working hours, pauses and rests, night work, minimal holiday, safety and health at work and special protection of workers. For approximately one quarter of the duration of the public work program, the unemployed persons are to participate in training programs.

The aim of the public work program is to ensure that social and work-

TABLE 1 Data on participants in public work programs in Slovenia in the period 2005–2008

Structure	2005	2006	2007	2008
By gender				
Women	3,087	2,727	2,089	2,460
Men	2,281	1,999	1,386	1,476
By age				
Up to 18	7	21	2	2
18 to 26	886	999	242	340
26 to 30	897	684	767	732
30 to 40	990	799	769	891
40 to 50	1,039	884	625	723
50 and above	1,549	1,339	1,070	1,248

Continued on the next page

ing engagement of target groups of uneployed persons with inclusion in the working environment, rising the level of their knowledge, working abilities and motivating participants for their own professional development, stimulation of employers for regular employment of participants as well as activating local communities to solve the unemployment problem on their own area.

Activities of the public work program are intended for those who are long-term unemployed and who have not managed to change their status so far. In the public work program preferentially are included the long-term unemployed, recipients of social assistance, older unemployed persons (above 50 years), young unemployed persons (up to 24 years) and seekers of a first job. In the year 2006 there were 4,726 participants in the public work program, in the year 2007 there were 3,475 and in the year 2008 there were 3,936 participants in the public work program (Ministry of Labour, Family and Social Affairs 2006; 2007; 2008).

In table 1 we show the data on participants in public work programs for the period 2005–2008 in Slovenia. The number of women participating in public work programs is for all years constantly higher than the number of men participating. The number of young people, up to 30 years, decreased by 716 from 2005 to 2008, while the number of people above 40 years decreased by 617. Among participants in public work programs the most are being unemployed for one year and more. In the period 2005–2008 the most significant fall in the number of unemployed

TABLE 1 *Continued from the previous page*

Structure	2005	2006	2007	2008
By unemployment duration (waiting period)				
Up to 6 months	709	494	416	530
From 6 months to 1 year	923	589	220	282
1 year and more	2,737	2,055	2,075	2,273
3 years and more	999	1.588	764	851
By qualification/education				
I.	1,004	934	652	722
II.	221	199	114	128
III.–IV.	837	778	604	623
V.	2,163	1,793	1,268	1,532
VI.–VII.	1,143	1,022	837	931
Total	5,368	4,726	3,475	3,936
Exit to employment	772	814	675	596

persons by duration of unemployment was for those unemployed from 6 months to one year.

The majority of participants in public work programs had fifth level of education, whereas for those with first as well as with sixth and seventh level of education the number decreased. In 2008, 35.1% of participants in public work programs were included in social programs; 31.4 % of participants were included in the fields of public administration, education, culture, tourism, catering industry and sport; 19.1% of participants were included in the field of environment and ecology, construction, traffic and communications; 12.6% of participants were included in other services, whereas 1.9% of participants were included in the field of agriculture, forestry, fishery and hunting (Ministry of Labour, Family and Social Affairs 2008).

Data and variables

DATA

The data used in this empirical study cover a random sample of approximately 3000 unemployed persons collected from the unemployment register kept by the Employment Service of Slovenia. The unemployment register includes records of all individuals who have been registered with the Employment Service as unemployed persons and who are actively searching for a job. The advantages of this source of data are the availability and accuracy of data, and the fact that the data can be shown at the lowest possible level (having regard to the protection of personal data). Whereas the disadvantage of such a database is that the data do not allow for international comparisons.

The target group in our empirical analysis represents young unemployed persons aged from 20 to 29. For each person used in this study we have data on registration dates, data on labor market status: unemployed person not included in the employment program and unemployed person included in the institutional training program, and individual characteristics.

Table 2 presents the descriptive statistics of some selected variables for a group of non-participants and a group of participants in the public work program. The data are for the years 2002 and 2003. Among the group of non-participants and the group of participants in the public work program there are differences in program characteristics as well as in individual characteristics. Duration of unemployment before the program start is shorter for the group of non-participants compared with the group of participants in the public work program. Secondly, the group of participants in the public work program consists of persons who registered quite early with the Employment Service, and thus also started earlier in the program. The differences are also in gender, age, education and region.

VARIABLES THAT POTENTIALLY INFLUENCE THE PROCESS OF SELECTION INTO THE EMPLOYMENT PROGRAM

Variables that might influence the decision to participate in the institutional training program as well as future potential outcomes should be included in the conditioning set X, and therefore in the propensity score in order to avoid biased estimates of the causal effects. The key to addressing the sample selection (endogeneity) problem is to obtain an understanding of how different individuals end up in different programs. We discuss the main determinants of selection and then explain which observable variables are used to capture them. We focus on the determinants that can be divided into two groups: those required by legislation, and those that may be underlying the decisions of the employment consultant and the unemployed.

Inclusion into the institutional training program (or any other employment program) is based on the fact that the unemployed person has

TABLE 2 Descriptive statistics

(1)	(2)	(3)
Gender (%)		
Male	53.4	37.2
Female	46.6	62.8
Age (average)	24.4	25.4
Region (%)		
Pomurska	5.3	14.9
Podravska	16.9	28.4
Koroška	5.1	0.7
Savinjska	12.7	35.6
Zasavska	2.2	3.2
Spodnjeposavska	2.9	4.6
JV Slovenija	4.8	3.7
Osrednjeslovenska	27.6	0.6
Gorenjska	9.8	1.5
Notranjsko-kraška	2.6	0.9
Goriška	5.8	3.8
Obalno-kraška	4.3	2.1
Education (%)		
Unfinished/finished elementary school	15.8	4.8
Lower vocational school (2 years)	3.1	2.8
Lower vocational school (3 years)	0.7	0.3
Vocational school (4 years)	18.7	15.9
High school	41.4	48.4
University (2 year degree)	1.7	6.6
University (4 year degree)	18.5	21.2
Master's degree	01	0
PhD	0	0
Duration of unemployment before the program start in months (average)	4.3	19.5
Number of observations	1346	725

NOTES Column headings are as follows: (1) variable, (2) non-participants, (3) participants in the public work program. 'Program start' for the group of non-participants is a hypothetical date randomly assigned by a procedure suggested by Lechner (1999b). 'Duration of unemployment before the 'program start' for the group of non-participants is based on this hypothetical date.

to be entered in the unemployment register kept by the Employment Service of Slovenia. Being entered in the unemployment register is, in accordance with legislation, a formal precondition for enforcement of rights from insurance in the case of unemployment, inclusion into occupational consultancy and into active employment programs. Given that the eligibility rules are met and that the unemployed person has been registered with the Employment Service, the unemployed person is given the right to draw unemployment benefit.

At least two months after the unemployed person has been registered with the Employment Service the unemployed person, together with the employment consultant, prepares an employment plan. The unemployed person accepts all agreed obligations by signing the employment plan. The employment consultant and unemployed person meet at least every three months in order to discuss the job search efforts of the unemployed person since their last meeting, new job offers available, potential benefits of participating in employment programs, as well as potential adaptations of their strategy for getting the unemployed person back to work.

Usually it is the employment consultant – but it may also be the unemployed person – who proposes participation in the employment program to improve the chances of finding a job. In the case of participation in the employment program, the unemployed person signs a contract in which all formal rights and obligations are determined. In the case of participation in the employment program the unemployment benefit right remains. There is no legal entitlement to the employment program, and the employment consultant has a considerable amount of discretion when making a decision about program participation. However, the employment consultant has to use this discretion in accordance with the aims and objectives of the employment program. The situation and development of the labor market also has to be considered, and the employment consultant has to act on the basis of the principle of economic efficiency. In addition, the employment consultant has to take into account the aptitude of the applicant for specific jobs and his/her chances of completing a specific program successfully. In particular, the employment consultant's decision has to be guided by the consideration as to which of the measures available have the highest chances of success and are the least costly, that is, most efficient for a specific individual.

According to our knowledge of the 'average' selection process, the employment consultant's decision about referral of applicants to specific programs may be guided by two objectives: efficiency or equity. Employment consultants pursuing efficiency goals assign those individuals to the programs that are expected to benefit most from them. In contrast, equity goals require employment consultants to select the neediest individuals into the programs, where neediness is defined by some criterion, e. g. a high risk of becoming long-term unemployed. Variables that are used in the empirical analysis to capture such selection are age, sex, education and region. We also included a variable describing unemployment history, that is, duration of unemployment before the program start. The importance of unemployment history can be found in Heckman and Smith (1995). We could also capture the unemployed features by other indicators such as last job position (short-term/long-term employment, qualified/unqualified worker), branch of activity.

From the point of view of the unemployed, their decision whether or not to participate in a program is guided by considerations very similar to those of the employment consultant. There are, however, additional reasons for joining or not joining a program: if the unemployed person sees no chance of finding a job anyway, with or without a program, he/she may prefer not to join a program which reduces his/her free time. We capture this fact by using their unemployment history as well as regional variables as a proxy. Finally, legislation also provides a rather strong incentive to participate in the employment program as the unemployed person is still entered in the unemployment register, even if he/she does not find a job after the program ends. In this case, he/she can still enforce the right to unemployment benefit. We could control for this fact with the variable enforcement of unemployment benefit at the beginning and at the end of a spell.

Having discussed potentially important factors and variables available for the empirical analysis, the question is whether or not some important groups of variables are missing. One such group could be described as motivation, ability, social contacts (see, for example, Lechner 1999a). We could capture such attributes by using professional achievements, achievements at their working place, independence at work, confronting with changes. Unfortunately our database does not currently allow for such information. As usual for these variables, we have to rely on their indirect effects.

Empirical Application

The Heckman selection estimator is an extensively used method to control for selection based on unobserved variables. It relies on the assumption that a specific distribution of the unobservable characteristics jointly influences participation and outcome. By explicitly modeling the participation decision (estimating the first step equation $\text{PWP}_i = X_i\gamma_1 + Z_i\gamma_2 + u_i$, generally using a Probit specification, where PWP stands for public work program and is a choice variable), it is possible to derive a variable that can be used to control for the potential correlation between the residual of the outcome equation and that of the selection equation. By including this new variable alongside the observable variables (X_i) and the public work program dummy in the second step (outcome) equation, Heckman can generate unbiased estimates of ATT (ATT stands for average treatment effect on the treated). However, as for example with the IV approach, credible implementation requires the selection equation to contain an instrument, and the identification of a suitable instrument is often an obstacle to proper implementation (Heckman 1998; Vandenberghe and Robin 2004).

We focus on the impact of the public work program upon the youths' chances of finding a job (measured as the probability of being employed one/two years after the program start and expressed as the differential being equal to participant minus non-participant mean). The principal obstacle in obtaining unbiased estimates of the impact of the public work program on the chances of finding a job is the problem of selection. Individuals opting to participate in the public work program may differ from those opting not to in many aspects, some of which may be unobservable. If these unobservable characteristics also affect the job prospects of the individual, the equation to be estimated can be mis-specified and the estimated coefficient biased.

The direction of the bias cannot be determined in advance. It is possible that individuals who enroll in the public work program are mostly those whose self-esteem and motivation are low. The chances of those individuals, ceteris paribus, moving from unemployment into work are lower than the chances of other unemployed persons. This produces a downward bias in the coefficient of participation in the estimation which does not correct for selectivity (the effect of the public work program is therefore underestimated). On the other hand, it is possible that the public work program attracts more motivated and agile individuals, which produces an upward bias in the coefficient of participation in the estimation which does not correct for selectivity (see, for example, Vodopivec 1999).

To rectify this selection bias we run a Heckman model, where in the first stage the equation of participation in the public work program is estimated. The outcome of that stage is a new variable (the inverse Mills ratio), to be used as one of the covariates in the second stage – in the estimation of the equation of exit from unemployment.

As already mentioned, the model depends on the presence of a proper

TABLE 3 Sensitivity of probability of being employed to the variable region (probit estimates)

(1)	(2)	(3)	(4)	(5)
Gender	0.136	0.0216	6.33	0.000
Age	0.179	0.0724	2.47	0.013
Age^2	–0.004	0.0015	–2.53	0.012
Education	0.055	0.0062	8.87	0.000
Unemployment before the program start	0.036	0.0015	20.14	0.000

NOTES Column headings are as follows: (1) variable, (2) marginal effect, (3) standard error, (4) z, (5) P.

TABLE 4 Probability of being employed one year/two years after the program start

One year after the program start			Two years after the program start		
ATT	Std. err.	P	ATT	Std. err.	P
0.352	0.073	0.000	0.151	0.075	0.046

instrument in the first equation (choice equation). We have opted for a dummy variable 'region,' equal to 1 (Osrednjeslovenska, Gorenjska, Notranjsko-Kraška, Goriška and the Obalno-Kraška Region) and to 0 otherwise. This variable fulfills the first condition to be an instrumental variable candidate (Wooldridge 2002): to be correlated with the endogenous variable or choice variable PWP, ceteris paribus. As can be seen in table 3, the (marginal) effect of region on the participants' chances of finding a job is strongly significant and evident.

Whereas the second condition for a variable to be an instrumental candidate (non-correlation with the residuals of the outcome equation) cannot be tested; which makes the choice of an instrument largely dependent on sensible arguments. We believe that there are plausible circumstances that would make 'region' a valid instrument. If participation in a public work program is more frequent in regions that are less-developed and have more rural areas, the risk of overestimating the effectiveness of the public work program is serious. Since the values of the coefficients in table 3 are not so big and the sign of coefficients is not the same across variables, we could consider that this somehow reduces the risk of overestimating the effectiveness of the public work program. But it could still be the case that the relative prevalence of the public work program according to region somehow reflects demand-side factors, in which case the endogeneity problem would remain.

Results, as presented in table 4, however, show the impact of the public work program on participants' chances of finding a job, especially in the short run. With Heckman's two-stage method the probability of being employed one year after the program start is approximately 35% and is high. This is due to the correction of selection, suggesting that estimates exaggerate the effectiveness of the public work program. When we measure the probability of being employed two years after the program start, Heckman's two-stage method generates results that are lower and could be related to stigmatization of the participants in the public work program. However, in the long run, the probability of being employed falls (but is not statistically significant).

Conclusion

The main purpose of this paper was to evaluate the Slovenian public work program for young unemployed persons using re-employment probabilities as a key measure of effectiveness. The age group examined was 20–29.

The Heckman selection estimator used in the empirical analysis is an extensively used method to control for selection on unobserved variables. It relies on the assumption that a specific distribution of the unobservable characteristics jointly influences participation and outcome. By explicitly modeling the participation decision it is possible to derive a variable that can be used to control for the potential correlation between the residual of the outcome equation and that of the selection equation. By including this new variable alongside the observable variables and the public work program dummy in the outcome equation, Heckman can generate unbiased estimates of ATT. The results suggest that the public work program has a positive effect on employment in the short run, whereas, in the long run, the probability of being employed significantly falls, but is still positive. Only in the short run are the results statistically significant at the 5% level. According to international studies the results for public work programs are not so obvious. Martin and Grubb (2001) show that numerous studies have not been successful in decreasing the number of unemployed. On the other hand, the public work program has had some positive effects in countries which were faced with serious problems in the labor market especially in the short run. In Poland the public work program is effective only for women, whereas men had serious problems in finding regular employment (Kluve, Lehmann, and Schmidt 1999). Reasons for such a situation could be stigmatization of participants in the public work program as well as the institutional background of active employment policy where renewal of the right to unemployment benefit is possible. An alternative explanation is given in Puhani and Steiner (1997). They suggest that target groups are poorly defined. In Finland the results are not so straightforward (Hämäläinen and Ollikainen 2004), whereas in France the effects on re-employment probabilities are even negative (Brodaty, Crépon, and Fougére 2000).

The study presented in this paper contributes to the relatively thin literature on the topic of evaluation of the active employment policies in Slovenia (especially for the youth) and presents the use of recent data of relatively good quality.

References

Brodaty, T., B. Crépon, and D. Fougére. 2000. 'Using Matching Estimators to Evaluate Alternative Youth Employment Programs: Evidence from France.' CEPR Discussion Papers 2604, Centre for Economic Policy Research, London.

Hämäläinen, K., and V. Ollikainen. 2004. *Differential Effects of Active Labour Market Programmes in the Early Stages of Young People's Unemployment.* Helsinki: Government Institute for Economic Research.

Heckman, J. 1998. 'The Economic Evaluation of Social Programs.' In *Handbook of Econometrics,* edited by J. Heckman and E. Leamer, 5:1673–94. Amsterdam: Elsevier.

Heckman, J., and J. Smith. 1995. 'Assessing the Case for Social Experiments.' *Journal of Economic Perspectives* 9 (2): 85–110.

Kluve, J., H. Lehmann, and C. Schmidt 1999. 'Active Labor Market Policies in Poland: Human Capital Enhancement.' *Journal of Comparative Economics* 27 (1): 61–89.

Lechner, M. 1999a. 'Earnings and Employment Effects of Continuous off-the-Job Training in East Germany After Unification.' *Journal of Business and Economic Statistics* 17:74–90.

———. 1999b. 'Identification and Estimation of Causal Effects of Multiple Treatments Under the Conditional Independence Assumption.' IZA Discussion Papers 91, IZA, Bonn.

Martin, J., and D. Grubb. 2001. 'What Works and for Whom: A Review of OECD Countries' Experiences With Active Labour Market Policies.' *Swedish Economic Review* 8 (2): 9–56.

Ministry of Labour, Family and Social Affairs. 2005. 'Annual Report of National Employment Service in Slovenia for the Year 2005.' Ministry of Labour, Family and Social Affairs, Ljubljana.

———. 2006. 'Annual Report of National Employment Service in Slovenia for the Year 2006.' Ministry of Labour, Family and Social Affairs, Ljubljana.

———. 2007. 'Annual Report of National Employment Service in Slovenia for the Year 2007.' Ministry of Labour, Family and Social Affairs, Ljubljana.

———. 2008. 'Annual Report of National Employment Service in Slovenia for the Year 2008.' Ministry of Labour, Family and Social Affairs, Ljubljana.

Puhani, P., and V. Steiner. 1997. 'The Effectiveness and Efficiency of Active Labour Market Policies in Poland' *Empirica* 24 (3): 209–31.

Vandenberghe, V., and S. Robin. 2004. 'Evaluating the Effectiveness of Private Education Across Countries: A Comparison of Methods.' *Labour Economics* 11 (4): 487–506.

Vodopivec, M. 1999. 'Does the Slovenian Public Work Program Increase Participants' Chances to find a Job?' *Journal of Comparative Economics* 27 (1): 113–30.

Wooldridge, J. M. 2002. *Econometric Analysis of Cross-Section and Panel Data.* Cambridge, MA: MIT Press.

Capital Structure and Market Power: Evidence from Jordanian Banks

Faris Nasif Al-Shubiri

This paper provides new insights into the way in which the capital structure and market power and capital structure and profitability are related. We used sample data of fourteen banks listed on the Amman Stock Exchange for the period from 2005 to 2008. We examine the dependent variable, which are expressed by total debt deflated by total assets, while the independent variables are Tobin *Q*, Growth, Profitability, Size, Ownership, Risk and Tangibility ratio. The OLS estimation results indicate that, at lower and higher ranges of Tobin's *Q*, banks employ higher debt, and reduce their debt at intermediate range. This is due to the complex interaction of market conditions, agency costs, and bankruptcy costs. We also show the saucer-shaped relation between capital structure and profitability because of the interplay of agency costs, costs of external financing and interest tax-shield. We find that size tangibility variables have a positive influence both on capital structure and on the other hand on growth, while risk and ownership variables have a negative influence on capital structure.

Key Words: knowledge, competitiveness, firm performance, knowledge-based theory
JEL *Classification:* G30, G21, G28

Introduction

Capital structure decisions are crucial for the financial wellbeing of the firm. Financial distress, liquidation and bankruptcy are the ultimate consequences laying ahead if any major misjudgment occurred following any financing decision of the firm's activity. One of the strategies a firm should look into is to lower the weighted cost of capital. This will increase net economic return, which eventually increases the firm's value. Hence, maximizing the firm's value is the focal point for every financing decision made by the management of the company. The management of the firm operating in the very uncertain world has a tough task ahead in achieving the best capital structure.

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However, the key to choosing an appropriate and acceptable level of financial leverage is still debatable by the top management of a firm. Many theories and much empirical evidence in providing optimal capital structure exist in the real world. Yet, this is still a cloudy area and with no specific guidelines to assist financial officers in attaining an efficient mixture of debt and equity. Thus, only clues and calculated judgment plus some understanding of financial theory are possible tools to be applied in facilitating how the financing mix affects the firm's value and its stock price.

There are some studies that provide evidence on the capital structure determinants from the emerging markets of South-east Asia (Pandey 2001; Pandey et al. 2000; Annuar and Shamsher 1993; Ariff 1998). The focus of corporate finance empirical literature has been to identify some 'stylised' factors that determine capital structure. Modigliani and Miller (1958) initiated the theory of capital structure in their influential seminal work on the effects of capital structure on the firm's value. They demonstrate and finally conclude that the 'capital structure is an irrelevance' in a perfect financial market, considering the no-tax case in the 'pie model,' which literally means that the firm's value is independent of its financing or financial structure. They argue that the size of the pie does not depend on how it is sliced, but depends only on the level and risk of its future cash flows. Modigliani and Miller (1963) even illustrate how firms should utilize 'all' debt financing, because interest is deductible for tax purpose. This 'tax shield' allows firms to pay lower taxes than they should if equity financing is used, thus attaining optimal capital structure through tax saving. Surprisingly, despite all the criticism and controversial issues arising from the M&M proposition, the empirical work by Hatfield, Cheng, and Davidson (1994) supports the M&M theorem. As time moved on, and with recent developments in the corporate world, more researches have examined in greater depth the concept of capital structure.

The trade-off theory of capital structure comes at a later stage, which is concerned about the corporate finance choices of firms, and is widely discussed. Its rationale is to describe the fact that firms are usually financed by some proportion of debt and equity. It proposes the principle that a firm's target leverage is driven by tax-shields, bankruptcy costs of debt and agency conflicts. Under the trade-off theory, it affirms the advantages of using debt because the firm can gain a tax shield by using some proportion of debt in financing the company. The tax shield comes from the interest payment as a tax deductible item, which means that the higher the interest payment on debt employed, the lower will be the taxes paid by the firm. However, as companies decide to use more debt, this will put companies in the position of financial distress due to the possibility of the firm being in default in meeting its liabilities obligations. Financial distress will include bankruptcy and non-bankruptcy cost. In conclusion, the trade-off theory suggests that optimal capital structure can be attained. However, firms should take appropriate actions in balancing between the tax benefits of higher debt and the greater possibility of financial distress costs, while aiming to optimize their overall value. Early empirical evidence on the trade-off theory by Bradley, Jarrel, and Kim (1984) reported mixed result.

Debt is an effective tool to lessen the agency costs, and eventually optimal capital structure can be derived from the balance between the costs of debt against the benefits of debt. In viewing the conflicts between shareholders and bondholders, covenants will protect the bondholders' position so that they can mitigate the risk of default payment. However, the agency costs only arise when the risk of defaults payment exists. Even though the agency costs of debt are burdensome, they are the solution towards obtaining external funds at a lower rate. The choice of capital structure brings signals to outside investors through the information of insiders. Ross (1977) assumes that managers (the insiders) know the true distribution of firms' returns, but investors do not. If managers decide to add more debt into capital structure, investors interpret this as a signal of high future cash flows and the firm is committed towards its contractual obligation. Thus, this will show a higher level of confidence that the management has towards the firm's prospect in the near future. However, if managers decide to finance the firm by issuing new equity, this signals that management is lacking in confidence towards future prospects of the firm. Accordingly, it concludes that investors take larger levels of debt as a signal of higher quality and that profitability and leverage are thus positively related. The first and foremost purpose of the present study is to determine the relationship between capital structure and market power. This will clarify the extent of optimal debt and equity used in financing the firms' activity in emerging markets, such as the Jordanian one. This study explains the relation between capital structure and market structure and the relation between capital structure and profitability, and also sheds light on the Jordanian capital structure area and how to lead the financial managers in determining the right choices in the capital structure policy in the future. The main hypotheses of this study can be developed:

H1 *There is no statistically significant effect of Tobin Q on capital structure.*

H2 *There is no statistically significant effect of profitability on capital structure.*

H3 *There is no statistically significant effect of growth on capital structure.*

H4 *There is no statistically significant effect of unsystematic risk on capital structure,*

H5 *There is no statistically significant effect of asset size on capital structure.*

H6 *There is no statistically significant effect of tangibility on capital structure.*

H7 *There is no statistically significant effect of ownership on capital structure.*

The remaining sections of the paper are organized as follows: the second provides the theoretical framework, the third section presents a review of empirical studies, the fourth section describes data and research methodology, the fifth section reports on the results of the statistical analyses, and the last summarizes the main conclusions and recommendations of the study.

Theoretical Framework

THEORIES OF CAPITAL STRUCTURE

Modigliani and Miller (1958) initiated the theory of capital structure in their influential seminal work on the effects of capital structure on the firm's value. They demonstrate and finally conclude that the 'capital structure is an irrelevance' in a perfect financial market, considering the no-tax case in the 'pie model,' which literally means that the firm's value is independent of its financing or financial structure. They argue that the size of the pie does not depend on how it is sliced, but depends only on the level and risk of its future cash flows.

Hatfield, Cheng, and Davidson (1994) support the M&M theorem. As time has moved on,and with recent developments in the corporate world, more researches have examined more deeply the concept of capital structure. The trade-off theory of capital structure comes at a later stage, which is concerned about the corporate finance choices of firms and is widely discussed. Its rationale is to describe the fact that firms are usually financed by some proportion of debt and equity. It proposes the principle that a firm's target leverage is driven by tax shields, bankruptcy costs of debt and agency conflicts.

Agency cost is also an important issue in determining the capital structure of a firm. It arises due to the conflict of interest between shareholders and managers, or between shareholders and bondholder managers, who are given the authority by the shareholders to manage the firm, on the assumption that managers will act in the interest of the firm's welfare and shareholders' benefits (Jensen and Meckling 1976). However, the agency costs only arise when the risk of defaults payment exists. Even though the agency costs of debt are burdensome, they are the solution towards obtaining external funds at a lower rate. The choice of capital structure brings signals to outside investors through the information of insiders. Ross (1977) assumes that managers (the insiders) know the true distribution of the firm's returns, but investors do not. If managers decide to add more debt into the capital structure, investors interpret this as a signal of high future cash flows, and the firm is committed towards its contractual obligation. Thus, this will show the higher-level of confidence the management has towards the firm's prospects in the near future.

However, if managers decide to finance the firm by issuing new equity, this signals that management is lacking in confidence towards the future prospects of the firm. Accordingly, it concludes that the investors take larger levels of debt as a signal of higher quality, and that profitability and leverage are thus positively related.

The Pecking Order theory was first initiated by Myers (1984) and Myers and Majluf (1984). The theory tries to capture the costs of asymmetric information and assumes that the management of the company knows more about the future prospects of the firms than do outsiders. It makes the announcement to issue debt or equity meaningful to outsiders, as it is a signal of management prospects in the future. The market will give a positive reaction if the company starts to buyback its shares. To sum up, the pecking order theory tries to generate ideas that firms will use the hierarchy of financing. Firstly, they will tend to use internal funds, otherwise, if not adequate, they will finance with external funds and with debt. That will make equity for the last resort in financing the capital structure of the company.

BANKS AND CAPITAL STRUCTURE

The standard competitive paradigm, that less competition leads to market power (Bain 1956), may not be appropriate for the banking industry. Due to the asymmetric information inherent in bank lending, banking competition may have a 'special nature.' Stiglitz and Weiss (1981) show that asymmetric information may cause credit rationing. However, Bester (1985) contests this result and suggests that credit-rationing problems can be circumvented when banks compete by choosing collateral requirements and using the interest rate to screen the risk to borrowers. Furthermore, De Meza and Webb (2007) state that the conditions needed for credit rationing to occur are too stringent. This suggests that, irrespective of the market structure, rationing can occur. Banks face an adverse selection problem and have to screen firms when they give loans. Conditional on the outcome of this screening, banks compete with each other by setting a loan rate. This procedure reduces the adverse selection problem, but it does not completely eliminate it if the screening tests are imperfect (Broecker 1990). Price competition and independent test procedures create a negative externality. Setting a higher loan rate than competitors produces two opposite effects on the profit of the deviating bank.

On the one hand, higher lending rates increase profits.On the other hand, they worsen the quality of firms accepting the loan, thus reducing profits. A firm will accept the least favorable loan rate only after being rejected by all other banks setting more favorable rates; but this implies that the firm has a low credit-worthiness on average. Because of this 'winner's curse' problem, increasing the number of banks performing screening tests decreases the average creditworthiness of firms, and increases the probability that a bank does not grant any loan. Consequently, equilibrium loan rates converge to oligopolist levels and banks end up making positive profits even with pure price competition. This implies that less bank market concentration may lead to high interest rates and less firm financing from banks

Petersen and Rajan (1995) investigate the effect of competition between banks on the availability of bank credit to firms. The Petersen and Rajan model shows how especially firms with uncertain future cash flows are negatively affected by competition between banks. Banks may be unwilling to invest in relationships by incurring initial losses that may never be recouped in the future (as firms can later on obtain a low loan rate in a competitive banking or financial market). Marquez (2002) also finds that more low-quality borrowers obtain financing, and banks may have to increase loan rates to compensate for the higher portfolio risk, thus leading to an inverse relationship between competition and the level of loan rates. This result may not obtain any longer, however, when information acquisition is endogenous.

In such a context, competition lowers loan rates, in the usual way. Hauswald and Marquez (2005) show that when banks acquire information to soften competition and increase market shares, a higher number of banks reduces the winner's curse problem originating from competitors' superior information, thus leading to lower loan rates. In other words, an increase in the number of competing banks reduces the degree of product differentiation among banks, and thus loan rates. Furthermore, the theoretical literature has identified several problems with relationship banking. There is potential for a hold-up problem (Sharpe 1990; Rajan 1992), whereby a relationship bank may use the superior private information it possesses about the firm in order to extract rents. As a result, theory offers contradicting predictions on the relationship between bank market structure and firms' capital structure. Therefore we distinguish between two hypotheses: the information-based hypothesis and the market power hypothesis.

Review of Empirical Studies

There are a few empirical studies that have investigated the issue of capital structure and market structure using data of the US firms. In these studies, market structure has been measured either in terms of price or quantity data or the Lerner index or the Herfindahl-Hirschman index, or Tobin's *Q*. Krishnaswamy, Mangla, and Rathinasamy (1992) find a positive relation between debt and market structure, measured by the Lerner index. Chevalier (1993) provides evidence in support of a negative relation between capital structure and market structure. This result is consistent with bankruptcy costs or the asymmetric information/pecking order hypotheses. Phillips (1995), using price and quantity data for market structure, finds a positive link between capital structure and market structure, consistent with the output and limited liability effect model. In a study of international firms from forty-nine countries, Rathnasamy, Krishnaswamy, and Mantripragada (2000) also report a positive relation between capital structure, measured by total debt ratio and long-term ratio and market structure measured by Tobin's *Q*. Their finding supports the output and limited liability effect and agency theoretic risk-shifting model of capital structure and product market interaction. The results also provide support for the free cash flow model of Jensen (1986), in the form of a positive relation between capital structure and profitability.

In empirical studies of determinants of capital structure, the Tobin *Q* ratio has also been used as a proxy for future investment opportunities. These studies show mixed results. A number of studies confirm a negative relationship between *Q* ratio and debt ratio (Titman and Wessels 1988; Barclay et al. 1995; Lasfer 1995; Rajan and Zingales 1995; Barclay and Smith 1996), while some find a positive relation (Michaelas et al. 1999).

Faulkender and Petersen (2006, henceforth FP) argue that information asymmetry and investment distortions are the market frictions that make capital structure choices relevant, but also imply that firms are sometimes rationed by their lenders. Thus, when estimating a firm's leverage, it is important to include not only the determinants of its preferred leverage (the demand side) but also the variables that measure the constraints on a firm's ability to increase its leverage (the supply side).

Pratomo and Ismail (2006), study the Islamic bank performance and capital structure based on 15 Malaysia Islamic Banks' Annual Report from 1997 until 2004. They consider the choice between debt and equity financing that has been directed to seek the optimal capital structure. Under the agency costs hypothesis, a high leverage tends to have an optimal capital structure and therefore it leads to producing a good performance, while the Modigliani-Miller theorem proves that it has no effect on the value of the firm. The importance of these issues has only motivated researches to examine the presence of agency costs in the nonfinancial firms. In financial firms, agency costs may also be particularly large because banks are by their very nature informationally opaque – holding private information on their loan customers and other credit counterparties. In addition, there are regulators that set minimums for equity capital and other types of regulatory capital in order to deter excessive risk taking and perhaps affecting agency cost hypothesis of Islamic Banks in Malaysia, under which a high leverage firm tends to reduce the agency costs. They set the profit efficiency of a bank as an indicator of reducing agency costs and the ratio equity of a bank as an indicator of leverage. Their findings are consistent with the agency hypothesis. The higher leverage or a lower equity capital ratio is associated with higher profit efficiency.

Pandey (2004) examines the relationship between capital structure and market structure using data from 208 Malaysian companies for the period from 1994 to 2000. This study provides new insights into the way in which capital structure and market power and capital structure and profitability are related. Capital structure and market power, as measured by Tobin's *Q*, are shown to have a cubic relationship, due to the complex interaction of market conditions, agency problems and bankruptcy costs. The study finds a saucer-shaped relation between capital structure and profitability, due to the interplay of agency costs, costs of external financing and debt tax shield

Bevan and Danbolt (2004) analyze the determinants of the capital structure of 1,054 UK companies from 1991 to 1997, and the extent to which the influence of these determinants is affected by time-invariant firm-specific heterogeneity. Comparing the results of pooled OLS and fixed effects panel estimation, they find significant differences in the results. While their OLS results are generally consistent with the prior literature, the results of their fixed effects panel estimation contradict many of the traditional theories of the determinants of corporate financial structure. This suggests that the results of traditional studies may be biased owing to a failure to control for firm-specific, time-invariant heterogeneity.

Drobetz and Fix (2003) have tested leverage predictions of the trade-off and pecking order models using Swiss data. At an aggregate level, the leverage of Swiss firms is comparatively low, but the results depend crucially on the exact definition of leverage. By confirming the pecking order model but contradicting the trade-off model, more profitable firms use less leverage. Firms with more investment opportunities apply less leverage, which supports both the trade-off model and a complex version of the pecking order model. Leverage is very closely related to the tangibility of assets and the volatility of a firm's earnings. Finally, estimating a dynamic panel model, they find that Swiss firms tend to maintain the target leverage ratio. Their findings are robust for several alternative estimation techniques

Data and Methodology

The sample data used in the study are for the four year period from 2005 through 2008. We exclude the fourteen banks whichtraded the stock of bank on the Amman Stock Exchange (ASE). The data for the empirical analysis were derived from the financial statements of these banks.

The estimation equation is as follows:

$$(\mathrm{TD/A})_{i,t} = \alpha_0 + \alpha_1 Q_{i,t} + \alpha_2(\mathrm{EBIT/A}) + \alpha_3 \mathrm{GA}_{i,t} + \alpha_4 \beta_{i,t} + \alpha_5 \log \mathrm{A}_{i,t} + \alpha_6 \mathrm{TAN}_{i,t} + \alpha_7 \mathrm{OWS}_{i,t} + \alpha_{i,t}.$$

Total debt-to-asset ratio (TD/A) at book value is our dependent variable. Independent variables include *Q* ratio, profitability, growth, unsystematic risk, size, ownership (number of shares) and tangibility. *Q* is calculated as the sum of the market value of equity and book value of long-term debt and net current assets (current assets minus current liabilities). Growth (GA) is measured as one plus annual change in assets. Profitability (EBIT/A) is defined as earnings before interest and taxes divided by assets or capital. Risk is defined as systematic risk, and it is measured by unlevered beta. Beta for each firm is calculated using the weekly share price data. The calculated beta for each company is unlevered for its level of leverage. Size is measured as the natural log of assets. Ownership (OWS) is measured by the natural log of the number of outstanding shares. It is assumed that a larger number of shares implies diffused ownership. Tangibility (TAN) is defined as fixed assets divided by assets.

The relationship between firm profitability and capital structure can be explained by the pecking order theory (POT), which holds that firms prefer internal sources of finance to external sources. The order of the preference is from the one that is least sensitive (and least risky) to the one that is most sensitive (and most risky), which arises because of asymmetric information between corporate insiders and less well-informed market participants (Myers 2001). By this token, profitable firms with access to retained profits can rely on them as opposed to depending on outside sources (debt). Murinde et al. (2004) observe that retentions are the principal source of finance. Titman and Wessels (1988) agree that firms with high profit rates, all things being equal, would maintain relatively lower debt ratios since they are able to generate such funds from internal sources.

Empirical evidence from previous studies seems to be consistent with the pecking order theory. Most studies found a negative relationship between profitability and capital structure. Hall et al. (2004) also suggest negative relationships between profitability and both long-term debt and short-term debt ratios.

Firm growth is likely to place a greater demand on internally generated funds and push the firm into borrowing (Hall et al. 2004). Firms with high growth will capture relatively higher debt ratios. In the case of small firms with more concentrated ownership, it is expected that high growth firms will require more external financing and should display higher leverage. (Heshmati 2001) maintain that growing SMES appear more likely to use external finance – although it is difficult to determine whether finance induces growth or the opposite (or both). As enterprises grow through different stages, i. e., micro, small, medium and large scale, they are also expected to shift financing sources.

They are first expected to move from internal sources to external sources. There is also a relationship between the degree of previous growth and future growth. Michaelas et al. (1999) argue that future opportunities will be positively related to leverage, in particular short term leverage.

Firm risk showing the level of risk is said to be one of the primary determinants of a firm's capital structure. The tax shelter-bankruptcy cost theory of capital structure determines a firm's optimal leverage as a function of business risk (Castanias 1983). Given agency and bankruptcy costs, there are incentives for the firm not to fully utilize the tax benefits of 100% debt within the static framework model.

The more likely a firm is exposed to such costs, the greater is their incentive to reduce their level of debt within its capital structure. One firm variable that affects this exposure is the firm's operating risk, in that the more volatile the firm's earnings stream, the greater is the chance of the firm defaulting and being exposed to such costs. According to Johnson (1997), firms with more volatile earnings growth may experience more situations in which cash flows are too low for debt service.

Despite the broad consensus that firm risk is an important determinant of corporate debt policy, empirical investigation has led to contradictory results. Esperança et al. (2003) found positive associations between firm risk and both long-term and short-term debt.

Berle and Means (1932) initially developed the agency theory, and they argued that there is an increase in the gap between ownership and control of large organizations arising from a decrease in equity ownership in theory, shareholders of a company are the only owners, and the duty of top management should be solely to ensure that shareholders interests' are met. In other words, the duty of top managers is to manage the company in such a way that returns to shareholders are maximized, thereby increasing the profit figures and cash flows (Elliot 2002)

The asset structure (Tangibility) of a firm plays a significant role in determining its capital structure. The degree to which the firm's assets are tangible should result in the firm having greater liquidation value (Titman and Wessels 1988). Bradley et al. (1984) assert that firms that invest heavily in tangible assets also have higher financial leverage since they borrow at lower interest rates if their debt is secured with such assets. It is believed that debt may be more readily used if there are durable assets to serve as collateral (Wedig et al. 1988). It is further suggested that bank financing will depend upon whether the lending can be secured by tangible assets (Berger and Udell 1998).

Empirical evidence suggests a positive relationship consistent with theoretical argument between asset structure and leverage for the firms (Bradley et al. 1984) Wedig et al. (1988), however, found a significant and negative coefficient between depreciation expense as a percentage of total assets and financial leverage. Other studies specifically suggest a positive relationship between asset structure and long-term debt, and a negative relationship between asset structure and short-term debt.

Data and Main Empirical Results

The lengths of trade credit terms are directly related to market power, as more valuable customers can negotiate more generous credit terms with suppliers. In addition, banks with a greater market share can stretch the credit terms offered by suppliers with little repercussion, as contracts with industry leaders are critical to the viability of smaller suppliers. Similarly, strong relationships with vendors allow banks with greater market power to hold fewer inventories. Suppliers with more market power relative to customers can negotiate shorter terms with customers for at least two reasons.

First, the level of competition from rival banks is reduced for banks with a large market share, which decreases the likelihood of losing customers over a reduction in credit terms. Second, suppliers with a large market share are more likely to have forged longer relationships with clients, implying high costs of switching suppliers.

We define market structure in terms of the market power of banks. Market power means control of a bank over price or volume of production. In operational terms, market power implies a firm's monopoly, or oligopoly or competitive power. Rathnasamy, Krishnaswamy and Mantripragada (2000) state that market structure (power) could be measured by the Lerner index, or the Herfindahl-Hirschman index, or Tobin's *Q*. Lindenberg and Ross (1981) show that Tobin's *Q* (or simply *Q*) is a theoretically sound and practically the most powerful indicator of a firm's market power. In a competitive market, *Q* of all firms will be equal to one. Firms with *Q* higher than one are expected to command the competitive advantage, either oligopoly or monopoly power.

Hence, we define market power in terms of *Q*. There is also a practical reason for using this definition of market power. In developing countries, price and quantity or segmental data are not available for measuring the Lerner index or the Herfindahl-Hirschman index. The theoretical definition of *Q* is the ratio of market value of the firm to replacement cost of assets. It is not easy to get replacement cost data in developing countries.

Table 1 provides means and standard deviations of the dependent and independent variables for each year from 2005 to 2008 and for the whole period. The average total debt ratio (TDR) for the period of 2005–2008 is .83. However, TDR has been steadily increasing over the years, ranging from .79 to .85 from 2005 to 2008. *Q* ratio has shown fluctuations during 2005–2008. It was lower in 2007 and 2008, corresponding with the financial and stock market crisis in Jordan, the results indicate 3.30–2.0–.83–1.57–2.25 respectively. Assets growth was quite high for the years from 2005–2008; but it showed a sharp decline in the last three years. Profitability also steadily declined significantly in 2006 and 2007.

Tables 2–6 provide correlation R for the sample of 15 banks. The results indicate that size and *Q* ratio have a significant positive relationship with total debt ratio, while risk (unlevered beta) and profitability EBIT/A have a significant negative relationship in year 2005, but in year 2006 the asset growths have a significant negative relationship. The negative relationship between risk and size implies that the large banks, being more diversified, have a lower systematic risk and also a negative significant relationship of profit and significant positive relationship of *Q* ratio. There is a positive significant relationship between size, and growth in year 2008 with total debt ratio, and negative with risk and tangibility.

Table 2 presents the results for 2005, and the main concern is to test the specification about the relationship between capital structure (total debt ratio) and market power. We find that there is a significant relationship between *Q* ratio, profitability and asset size at significant level 10% (sig. .09, t-test 1.824), 1% (sig. .000, t-test –5.016) and 5% (sig. .032, t-test 2.397) respectively, and the results indicate that the total independent variables are at a significant level of 5% (sig. .019, F-test .019), and the coefficient are significant at 1% level of significance. We interpret this evidence as consistent with the economic theory of output maximization and finance theories of agency costs and bankruptcy costs. For a given initial range of *Q* ratio, any increase in this ratio leads firms to increase output and take more risks to maximize shareholders wealth. This causes rivalry in the market, and competition intensifies, particularly from unlevered firms. The fear of bankruptcy and loss of invest-

TABLE 1 Descriptive Statistics for (*Q*, Growth, Profitability, Asset Size, Ownership, Risk, Tangibility, TD/TA) in Every Year and in Overall Years

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2005	Mean	3.30	1.05	.036	8.92	7.39	.032	.60	0.85
	N	15	15	15	15	15	15	15	15
	Std. dev.	1.12	2.86	.017	.51	.24	.018	.14	0.09
	Min.	1.65	.001	.02	8.06	7.38	.01	.40	0.55
	Max.	5.99	11.37	.08	10.20	8.25	.08	.79	0.95
2006	Mean	2.0	.87	.025	9.06	7.85	.08	.75	.79
	N	15	15	15	15	15	15	15	15
	Std. dev.	.67	2.72	.012	.59	.31	.16	.22	.20
	Min.	1.12	.04	.001	8.14	7.38	.001	.06	.09
	Max.	3.99	10.71	.06	10.3	8.55	.62	.94	.92
2007	Mean	.85	.06	.024	9.04	7.91	.024	.81	.85
	N	15	15	15	15	15	15	15	15
	Std. dev.	.05	.28	.014	.52	.30	.011	.08	.05
	Min.	1.23	.36	.01	8.11	7.38	.01	.59	.69
	Max.	4.14	.90	.07	10.3	8.55	.04	.98	.95
2008	Mean	1.57	.07	.04	9.07	.7.69	.08	.87	.84
	N	15	15	15	15	15	15	15	15
	Std. dev.	.45	.08	.06	.54	.31	.25	.13	.07
	Min.	.90	.12	.01	8.06	7.38	.01	.44	.63
	Max.	2.42	.24	.26	10.40	8.73	1.0	1.04	.92
2005–8	Mean	2.25	.51	.031	9.02	7.85	.05	.76	.83
	N	60	60	60	60	60	60	60	60
	Std. dev.	1.0	1.98	.033	.53	.30	.14	.18	.12
	Min.	.90	.90	.001	8.06	7.38	.001	.06	.09
	Max.	5.99	11.37	.26	10.40	8.73	1.0	1.04	.95

NOTES Column headings are as follows: (1) year, (2) index, (3) *Q*, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) tangibility, (9) risk, (10) TD/TA.

ment and profitability obliges levered firms to reduce debt. Hence, for some intermediate range of *Q*, the competition forces levered firms to lessen debt.

Finally, for well-established, profitable firms with a very high *Q* ratio and low probability of financial distress and bankruptcy, the output

TABLE 2 Regression Analysis of the Relationship between Capital Structure and Market Power (2005)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2005	R	.451	.130	.812	.554	.289	.126	.213	.920
	R^2	.204	.017	.659	.306	.083	.016	.045	.847
	Adj. R^2	.143	–.059	.633	.253	.013	–.060	–.028	.693
	Sig.	.091*	.645	.000***	.032**	.296	.654	.445	.019*
	F-test	—	—	–	—	—	—	—	5.518
	T-test	1.824	.471	–5.016	2.397	1.088	–.458	-.787	—
	β	.451	.130	–.8112	.554	.289	–.126	–.213	—

NOTES Dependent variable: Total Debt Deflated by Total Assets. Column headings are as follows: (1) year, (2) index, (3) Q, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) risk, (9) tangibility, (10) total. * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

TABLE 3 Regression Analysis of the Relationship between Capital Structure and Market Power (2006)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2006	R	.171	.933	.202	.353	.015	.307	.136	.994
	R^2	.029	.870	.041	.124	.000	.095	.019	.989
	Adj. R^2	–0.46	.860	–0.033	.057	–.077	.025	–.057	.977
	Sig.	.543	.000***	.471	.198	.958	.265	.628	.000***
	F-test	—	—	—	—	—	—	—	87.691
	T-test	.624	–9.343	–.742	–1.358	–0.053	–1.165	.496	—
	β	.171	–.931	–.202	–.353	–.015	–.307	.136	—

NOTES Dependent variable: Total Debt Deflated by Total Assets. Column headings are as follows: (1) year, (2) index, (3) Q, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) risk, (9) tangibility, (10) total. * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

maximization seems to dominate the relation between capital structure and *Q* ratio.

Table 3 for year 2006 shows a significant relationship between the growth and capital structure at 1% (sig. .000, t-test –9.943) and a significant relationship between all independent variables and capital structure at 1% (sig. .000, F-test 87.691).

Table 4 for year 2007 shows a significant relationship between the *Q* ratio, profitability and risk and capital structure at different levels 10%,

TABLE 4 Regression Analysis of the Relationship between Capital Structure and Market Power (2007)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2007	R	.443	.055	.649	.282	.064	.722	.118	.892
	R^2	.196	.003	.421	.079	.004	.522	.014	.796
	Adj. R^2	.134	–.074	.377	.009	–0.073	.485	–.062	.591
	Sig.	.098*	.845	.009***	.309	.821	.002***	.674	.047**
	F-test	—	—	–	—	—	—	—	3.895
	T-test	1.780	.199	–3.075	1.059	.231	–3.766	–.430	—
	β	.443	.053	–.649	.282	.064	–.722	–.118	—

NOTES Dependent variable: Total Debt Deflated by Total Assets. Column headings are as follows: (1) year, (2) index, (3) Q, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) risk, (9) tangibility, (10) total. * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

TABLE 5 Regression Analysis of the Relationship between Capital Structure and Market Power (2008)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2008	R	.002	.543	.043	.485	.343	.486	.824	.891
	R^2	.000	.295	.002	.238	.118	.236	.678	.794
	Adj. R^2	–.077	.241	–.075	.177	.050	.177	.654	.588
	Sig.	.995	.036**	.878	.067*	.210	.067*	.000***	.048**
	F-test	—	—	–	—	—	—	—	3.851
	T-test	–.006	2.333	–.157	2.002	1.318	–2.002	–5.238	—
	β	–.002	.543	–.043	.485	.343	–.486	–.824	—

NOTES Dependent variable: Total Debt Deflated by Total Assets. Column headings are as follows: (1) year, (2) index, (3) Q, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) risk, (9) tangibility, (10) total. * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

1% and 5% respectively (sig. .098, t-test 1.780; sig. .009, t-test –3.075; sig. .009, t-test –3.766) and a significant relationship between all independent variables and capital structure at 5% (sig. .047, F-test 3.895). Thus, our results confirm a saucer-shaped relationship between debt ratio and profitability.

We interpret this evidence as a trade-off between the effects of asymmetric information, agency costs and tax benefits. For a given initial range of profitability, any increase in this ratio leads firms to internally

TABLE 6 Regression Analysis of the Relationship between Capital Structure and Market Power (2005–2008)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2005–8	R	.221	.497	.069	.025	.082	.274	.164	.382
	R^2	.049	.247	.005	.001	.007	.075	.027	.217
	Adj. R^2	.032	.234	–.012	–.017	–.010	.059	.010	–.210
	Sig.	.090*	.000***	.599	.848	.531	.034**	.211	.000***
	F-test	—	—	–	—	—	—	—	5.396
	T-test	1.726	–4.363	–.529	.192	.630	–2.168	–1.266	—
	β	.221	–.497	–.069	.025	.082	–.274	–.164	—

NOTES Dependent variable: Total Debt Deflated by Total Assets. Column headings are as follows: (1) year, (2) index, (3) Q, (4) growth, (5) profitability, (6) asset-size, (7) ownership, (8) risk, (9) tangibility, (10) total. * Significant at $p < 0.10$. ** Significant at $p < 0.05$. *** Significant at $p < 0.01$.

finance their output growth and minimize the cost of financing. It is also likely that at relatively lower levels of profitability, firms may not have much incentive to issue debt, as other non-debt tax shields may be available to them. There may also exist an intermediate range of profitability where firms do not have sufficient incentive either to increase or decrease any further. Finally, at higher levels of profitability and given their market power and intensifying competition, firms will increase borrowing to expand their output. Also, they have more profits to shield from taxes. Further, agency costs will be higher once firms reach high levels of profitability.

The coefficients of other control variables are also statistically significant. Consistent with the option model of Myers (1977) and the pecking order hypothesis of Myers and Majluf (1984), our results show a significant negative relation between growth and debt ratio. We also find a negative relationship between (systematic) risk and debt ratio. This finding is consistent with the trade-off theory. The positive relation between size and debt ratio is evidence in favor of the hypotheses that larger firms tend to be more diversified and less prone to bankruptcy, and the transaction costs of issuing debt are smaller. The negative relation between debt ratio and the size of shareholding means that more diffused ownership results in lower leverage. The result supports the agency hypothesis. The results indicate a significant positive relation of tangibility (FA/A ratio) with debt ratio. These results vindicate the trade-off theory that postulates a positive correlation between debt ratio and tangibility since fixed assets act as collateral in debt issues.

Table 5 for year 2008 shows that there is a significant relationship between the growth, asset, risk and tangibility and capital structure at different levels 5%, 10% and 1% respectively (sig. .036, *t*-test 2.333; sig. .067, *t*-test 2.002; sig. .067, *t*-test -2.002; sig. .000, *t*-test –5.238) and a significant relationship between all independent variables and capital structure at 5% (sig. .0487, *F*-test 3.851). Finally, table 6 contains all periods from years 2005–2008 and indicates a significant relationship between the *Q* ratio, growth and risk and capital structure at different levels, 10% and 1% respectively (sig. .090, *t*-test 1.726; sig. .000, *t*-test –4.363; sig. .034, *t*-test –2.168) and significant relationship between all independent variables and capital structure at 1% (sig. .000, *F*-test 5.396).

The arguments of the results are as follows. A bank in oligopoly condition sustains its aggressive production and high-income strategy by employing a higher level of debt. Shareholders of the bank gain in terms of increased wealth. In adverse market conditions, the limited liability provides protection to shareholders against the risky production decision by which lenders would suffer. Thus, the bank's debt level will increase as it gains market power reflected in *Q*. On the other hand, as debt increases, there are significant costs in terms of increased probability of bankruptcy and financial distress. This cost would be accentuated by the behavior of no or low-debt banks with 'deep purses.' They would resort to predatory price behavior and lead their rivals to bankruptcy. This argument suggests a negative relationship between capital structure and *Q*. These two opposing effects point to the possibility of a non-linear relationship between capital structure and market power. As a bank starts gaining market dominance, it will increase debt to increase its production and income. That is, as bank's market power increases, they employ more debt to pursue their output maximization strategy. This attracts rival banks to intensify competition by cutting price and/or output. At the intermediate level of market dominance when competition intensifies through price cut, higher costs of debt squeeze out the profitability of highly levered firms, and their chances of financial distress and bankruptcy increase. Levered banks react by reducing debt or increasing production through improved assets utilization. However, after consolidating their position, banks at a higher level of market dominance leverage make use of debt in expanding their production. Firms with strong profitability and reserve funds and high market dominance adopt a high-risk production strategy and use more debt. Thus, we can predict a cubic relationship between capital structure and market power. In other words, firms at relatively lower and higher levels of market power employ more debt, while firms at the intermediate level of market dominance are vulnerable to rivals' competitive threat and reduce their debt.

Conclusion and Recommendations

This study has empirically examined the relationship between capital structure and market power using data for 14 Jordanian banks for the period from 2005 to 2008. The study provides new insights into the way in which the capital structure is measured by total debt-to-assets ratio and market power. That is, at lower and higher ranges of Tobin's *Q*, banks employ higher debt, and reduce their debt at intermediate range. This is due to the complex interaction of market conditions, agency costs, and bankruptcy costs. We also show a saucer-shaped relation between capital structure and profitability because of the interplay of agency costs, costs of external financing and interest tax-shield. In addition to the *Q* ratio and profitability, other independent variables are included in my estimation. We find that size and tangibility have a positive and growth influence, while risk (systematic) and ownership have a negative influence on capital structure.

Future research can be directed in several ways. First, we will address the issue of dynamic estimation using system GMM to examine whether or not the underlying dynamic structure affects the findings. Second, we will look into the difference between manufacturing industries and services, since one can argue that firms in these sectors will react differently to increasing bank market concentration. Third, we want to instrument the bank market structure to explicitly account for potential endogenously. Finally, we will investigate whether the ownership structure of the firm has an impact on the relationship between bank market concentration and leverage

References

Annuar, M. N., and M. Shamsher. 1993. 'Capital Structure.' *Capital Market Review* 1 (2): 171–77.

Ariff, M. 1998. *Stock Pricing in Malaysia: Corporate Financial & Investment Management.* Helsinki: UPM Press.

Bain, J. S. 1956. *Barriers to New Competition.* Cambridge, MA: Harvard University Press.

Barclay, M. J., and C. W. Smith. 1996. 'On Financial Architecture: Leverage, Maturity and Priority.' *Journal of applied Corporate Finance* 8 (4): 4–17.

Barclay, M. J., C. W. Smith, and R. L. Watts. 1995. 'The Determinants of Corporate Leverage and Dividend Policies.' *Journal of Applied Corporate Finance* 7(4): 4–19.

Berger, A. N., and G. F. Udell. 1998. 'The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle.' *Journal of Banking and Finance* 22 (6–8): 613–73.

Berle, A. A., and G. C. Means. 1932. *The Modern Corporation and Private Property.* New York: Macmillan.

Bester, H. 1985. 'Screening vs. Rationing in Credit Markets with Imperfect Information.' *American Economic Review* 75 (4): 850–5.

Bevan, A. A., and J. Danbolt. 2004 'Testing for Inconsistencies in the Estimation of UK Capital Structure Determinants.' *Applied Financial Economics* 1 (1): 55–66.

Bradley, M., G. A. Jarrell, and E. H. Kim. 1984. 'On the Existence of Optimal Capital Structure Theory and Evidence.' *Journal of Finance* 39 (3): 857–78.

Broecker, T. 1990. 'Credit-Worthiness Tests and Interbank Competition.' *Econometrica* 58 (2): 429–52

Castanias, R. 1983. 'Bankruptcy Risk and Optimal Capital Structure.' *Journal of Finance* 38 (5): 1617–35.

Chevalier, J. A. 1993. 'Capital Structure and Product-market Competition: Empirical Evidence from the Supermarket Industry.' *American Economic Review* 85 (3): 415–35.

De Meza, D., and D. Webb. 2007. 'Credit Rationing: Something's Gotta Give.' *Economica* 73 (292): 563–78.

Drobetz, W., and R. Fix. 2003. 'What are the Determinants of the Capital Structure? Some Evidence for Switzerland.' Working Paper 4/03, University of Basel.

Elliot, B., and J. Elliot. 2002. *Financial Accounting and Reporting.* 12th ed. London: Prentice Hall / Financial Times.

Esperança, J. P., P. M. G. Ana, and A. G. Mohamed. 2003. 'Corporate Debt Policy of Small Firms: An Empirical (Re)Examination.' *Journal of Small Business and Enterprise Development* 10 (1): 62–80.

Faulkender, M., and M. Petersen. 2006. 'Does the Source of Capital Affect Capital Structure?' *Review of Financial Economics* 19 (1): 45–79.

Hall, G. C., P. J. Hutchinson, and N. Michaelas. 2004. 'Determinants of the Capital Structures of European SMEs.' *Journal of Business Finance and Accounting* 31 (5–6): 711–28.

Hatfield, G. B, L. T. W. Cheng, and W. N. Davidson. 1994. 'The Determination of Optimal Capital Structure: The Effect of Firm and Industry

Debt Ratios on Market Value.' *Journal of Financial and Strategic Decisions* 7 (3): 1–14.

Hauswald, R., and R. Marquez. 2005. 'Competition and Strategic Information Acquisition in Credit Markets.' *Review of Financial Studies* 19 (3): 967–1000.

Heshmati, A. 2001. 'The Dynamics of Capital Structure: Evidence from Swedish Micro and Small Firms.' *Research in Banking and Finance* 2:199–241.

Jensen, M. C. 1986. 'Agency Costs of Free Cash Flow, Corporate Finance and Takeovers.' *American Economic Review* 76 (2): 323–39.

Jensen, M. C., and W. H. Mecklin. 1976. 'Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure.' *Journal of Financial Economics* 3 (4): 305–60.

Johnson, S. A. 1997. 'An Empirical Analysis of the Determinants of Corporate Debt Ownership Structure.' *Journal of Financial and Quantitative Analysis* 32 (1): 47–69.

Krishnaswamy, C. R., I. Mangla, and R. S. Rathinasamy. 1992. 'An Empirical Analysis of the Relationship between Financial Structure and Market Structure.' *Journal of Financial and Strategic Decisions* 5 (3): 75–88.

Lasfer, M. A. 1995. 'Agency Costs, Taxes and Debt: The UK Evidence.' *European Financial Management* 1 (3): 265–85.

Lindenberg, E. B., and S. A. Ross. 1981. 'Tobin's *Q* Ratio and Industrial Organization.' *Journal of Business* 54 (1): 1–32.

Marquez, R. 2002. 'Competition, Adverse Selection, and Information Dispersion in the Banking Industry.' *Review of Financial Studies* 15 (3): 901–26.

Michaelas, N., F. Chittenden, and P. Poutziouris. 1999. 'Financial Policy and Capital Structure Choice in UK SMEs: Empirical Evidence from Company Panel Data.' *Small Business Economics* 12 (2): 113–30.

Modigliani, F., and M. H. Miller. 1958. 'The Cost of Capital, Corporation Finance and the Theory of Investment.' *American Economic Review* 48 (3): 261–97.

———. 1963, 'Corporate Income Taxes and the Cost of Capital: A Correction.' *American Economic Review* 53 (3): 443–53.

Murinde, V., J. Agung, and A. W. Mullineux. 2004. 'Patterns of Corporate Financing and Financial System Convergence in Europe.' *Review of International Economics* 12 (4): 693–705.

Myers, S. C. 1977. 'Determinants of Corporate Borrowing.' *Journal of Financial Economics* 5 (2): 147–75.

———. 1984. 'The Capital Structure Puzzle.' *The Journal of Finance* 39 (3): 575–92.

———. 2001. 'Capital Structure.' *Journal of Economic Perspectives* 15 (2): 81–102.

Myers, S. C., and N. S. Majluf. 1984. 'Corporate Financing and Investment Decisions when Firms Have Information that Investors Do Not Have.' *The Journal of Financial Economics* 13 (2): 187–221.

Pandey, I. M. 2004, 'Capital Structure, Profitability and Market Structure: Evidence from Malaysia.' *Asia Pacific Journal of Economics and Business* 8 (2): 78–91.

———. 2001. 'Capital Structure and the Firm Characteristics: Evidence from an Emerging Market.' Working paper, Indian Institute of Management, Ahmedabad.

Pandey, I. M., T. Chotigeat, and M. K. Ranjit. 2000. 'Capital Structure Choices in an Emerging Capital Market: Case of Thailand.' *Management and Change* 4 (1): 1–14.

Petersen, M., and R. Rajan. 1995. 'The Effect of Credit Market Competition on Lending Relationships.' *Quarterly Journal of Economics* 110 (2): 407–43.

Phillips, G. M. 1995. 'Increased Debt and Industry Markets: An Empirical Analysis.' *Journal of Financial Economics* 37 (2): 189–238.

Pratomo, W. A, and A. G. Ismail. 2006. 'Islamic bank performance and capital structure.' MPRA Paper 6012. http://mpra.ub.uni-muenchen.de/6012/1/MPRA_paper_6012.pdf

Rajan, R. 1992. 'Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt.' *The Journal of Finance* 47 (4): 1367–1400.

Rajan, R. G., and L. Zingales. 1995. 'What Do We Know about Capital Structure? Some Evidence from International Data.' *Journal of Finance* 50 (5): 1421–60.

Rathinasamy, R. S., C. R. Krishnaswamy, and K. G. Mantripragada. 2000. 'Capital Structure and Product Market Interaction: An International Perspective.' *Global Business and Finance Review* 5 (2): 51–63.

Ross, S. 1977. 'The Determination of Financial Structure: The Incentive Signaling Approach.' *Bell Journal of Economics* 8 (1): 23–40.

Sharpe, S. 1990. 'Asymmetric Information, Bank Lending, and Implicit Contracts: A Stylized Model of Customer Relationships.' *Journal of Finance* 45 (4): 1069–87.

Stiglitz, J., and A. Weiss. 1981. 'Credit Rationing in Markets with Imperfect Information.' *American Economic Review* 71 (3): 393–410.

Titman, S., and R. Wessels. 1988. 'The Determinants of Capital Structure Choice.' *The Journal of Finance* 43 (1): 1–19.

Wedig, G., F. A. Sloan, M. Assan, and M. A. Morrisey. 1988. 'Capital Structure, Ownership, and Capital Payment Policy: The Case of Hospitals.' *The Journal of Finance* 43 (1): 21–40.

Abstracts in Slovene

Strateški razvojni trendi v svetovni farmacevtski industriji
Dragan Kesič

Glavni namen članka je raziskati in opredeliti strateške razvojne trende v svetovni farmacevtski industriji med letoma 1996 in 2006. Radi bi raziskali, zakaj kot ključna strateška razvojna opcija v delovanju svetovne farmacevtske industrije prevladujejo združitve in nakupi. Raziskava preučuje raziskovalno hipotezo, po kateri intenzivni procesi globalizacije, naraščajoča konkurenčnost in spremenjene strukture konkurentov močno vplivajo na konsolidacijske (združevalne) razvojne smernice v svetovni farmacevtski industriji, kar se kaže v naraščajočemu številu združitev in nakupov farmacevtskih podjetij. Strateško pomembni in ključni dejavniki, kot so pomanjkanje novih izdelkov, povečana konkurenčnost, hitri proces globalizacije, intenzivnost marketinga in prodaje, spremenjene strukture tekmecev ter intenzivna tekma za svetovne tržne deleže in naklonjenost potrošnikov, spodbujajo intenzivne procese konsolidacije (združevanja) v svetovni farmacevtski industriji, kar je zaradi navedenih ključnih dejavnikov tržno spodbujan in pogojevan proces. Tako lahko ugotovimo, da postajata svetovna farmacevtska industrija in tudi farmacevtski trg vedno bolj oligopolna in monopolna.

Ključne besede: svetovna farmacevtska industrija, globalizacija, konsolidacija (združevanje), združitve in nakupi
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Vodstvene kompetence za upravljanje raznolikosti zaposlenih
Jan Visagie, Herman Linde in Werner Havenga

Novo razumevanje raznolikosti vključuje več kot le povečano število različnih skupin zaposlenih na plačilni listi. Pomembna predpostavka je, da je izkušnja raznolikosti v organizaciji odvisna od sloga managementa. Članek obravnava specifične paradigme managementa različnosti in teorije slogov vodenja, s katerimi smo se v empirični raziskavi lotili raziskovalnega problema, in sicer: »Ali je doživljanje upravljanja raznolikosti pri zaposlenih povezano s slogi vodenja ali kompetencami?« Da bi preučili doživljanje upravljanja raznolikosti, smo uporabili različne modele raznolikosti in kazalce vključenosti. V raziskavo o doživljanju upravljanja raznolikosti je bilo vključenih 2669 respondentov, podatke o slogih vodenja smo dobili od 440 vodstvenih delavcev.

Notranjo veljavnost in zanesljivost podatkov smo potrdili z vrednostmi Cronbachove alfe.

Ključne besede: upravljanje raznolikosti, prikupen slog vodenja, doživljanje, zanosen slog vodenja, management, simbolična vzajemnost
Klasifikacija JEL: D740, L290, M120, J53
Managing Global Transitions 9 (3): 225–247

Pomen naklonjenosti in zaupanja blagovnim znamkam pri izbiranju: vpogled v vedenje bolgarskih in madžarskih porabnikov med svetovno gospodarsko krizo

James E. Haefner, Zsuzsa Deli-Gray in Al Rosenbloom

Članek predstavlja rezultate raziskave globalnih blagovnih znamk, ki smo jo izvedli med nedavno gospodarsko krizo. S pomočjo raziskave smo skušali ugotoviti, kako bi štiri sestavine blagovne znamke (država izvora ter poznavanje, naklonjenost in zaupanje blagovni znamki) vplivale na namen za nakup izdelkov globalnih blagovnih znamk na vzorcu porabnikov v Bolgariji in na Madžarskem. Da bi preučili odnos do dvajsetih blagovnih znamk pri porabnikih v Bolgariji in na Madžarskem, smo uporabili modele multiple linearne regresije. Regresijski modeli so pokazali, da sta naklonjenost in zaupanje blagovni znamki najpomembnejša pokazatelja odločitve za nakup v obeh skupinah. Članek obravnava tudi pomen rezultatov te raziskave za trženje globalnih blagovnih znamk v obeh državah po koncu krize.

Ključne besede: zaupanje in naklonjenost blagovni znamki, Madžarska, Bolgarija, globalni marketing
Klasifikacija JEL: M31
Managing Global Transitions 9 (3): 249–273

Učinkovitost programa javnih del v Sloveniji

Laura Južnik Rotar

V članku ocenjujemo neposredne učinke programa javnih del v Sloveniji za mlade brezposelne osebe. Učinkovitost programa merimo z verjetnostjo ponovne zaposlitve. Za oceno povprečnih učinkov programa smo uporabili Heckmanovo korekcijo selekcije. Heckmanova cenilka je široko uporabljena metoda za kontroliranje selekcije na neopazovanih spremenljivkah. Temelji na predpostavki, da specifična porazdelitev neopazovanih lastnosti vpliva tako na sodelovanje kot tudi na izid. Rezultati empirične študije kažejo, da ima program javnih del pozitivne

učinke na zaposlitev na kratki rok, na dolgi rok pa rezultati niso več očitni.

Ključne besede: aktivna politika zaposlovanja, ocenjevanje, Heckmanov postopek, selekcija, učinki obravnave.
Klasifikacija JEL: C50, J38, J68
Managing Global Transitions 9 (3): 275–287

Kapitalska struktura in tržna moč: pokazatelji iz jordanskih bank
Faris Nasif Al-Shubiri

Članek ponuja nov vpogled v povezave med kapitalsko strukturo in tržno močjo ter kapitalsko strukturo in donosnostjo. Uporabili smo vzorec podatkov o štirinajstih bankah, ki so v obdobju od leta 2005 do leta 2008 kotirale na amanski borzi. Preučili smo odvisne spremenljivke, ki so izražene kot skupni dolg, zmanjšan za aktivo, neodvisne spremenljivke pa so bile Tobinov *Q*, rast, donosnost, velikost, lastništvo, tveganje ter razmerje med stalnimi sredstvi in aktivo. Rezultati ocene OLS kažejo, da se pri manjših in višjih vrednostih Tobinovega *Q* banke bolj zadolžijo, pri srednjih pa svoj dolg zmanjšajo. To je posledica zapletenih medsebojnih vplivov med razmerami na trgu, stroški posrednikov in stečajnimi stroški. Opozorili smo tudi na diskasto razmerje med kapitalsko strukturo in donosnostjo, kar je posledica medsebojnih vplivov agencijskih stroškov, stroškov zunanjega financiranja in obdavčenosti obresti. Ugotavljamo, da imata velikost in razmerje med stalnimi sredstvi in aktivo pozitiven vpliv na kapitalsko strukturo, po drugi strani pa rast, tveganje in lastništvo nanjo vplivajo negativno.

Ključne besede: koncentracija v bančništvu, kapitalska struktura, bančništvo, učinkovitost
Klasifikacija JEL: G30, G21, G28
Managing Global Transitions 9 (3): 289–310

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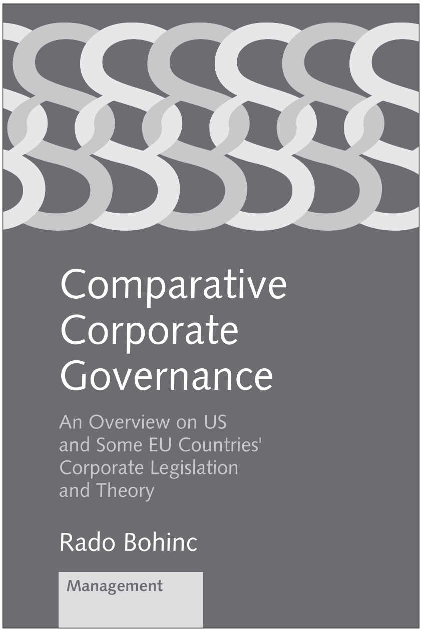

Comparative Corporate Governance: An Overview on US and Some EU Countries' Corporate Legislation and Theory

Rado Bohinc

December 2010
ISBN 978-961-266-065-9
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The Comparative Coporate Governance monograph contains the extensive research the author has done on the corporate governance systems of the USA, EU, UK, Germany, France, Slovenia and some other countries of the EU and out of EU.
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Managing Global Transitions

International Research Journal

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Jackson, R. 1979. 'Running Down the Up-Escalator: Regional Inequality in Papua New Guinea.' *Australian Geographer* 14 (5): 175–84.

Lynd, R., and H. Lynd. 1929. *Middletown: A study in American Culture.* New York: Harcourt, Brace and World.

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