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BUSINESS STUDENTS' SELF-PERCEIVED ENTREPRENEURIAL CHARACTERISTICS AND COMPETENCES AT THE BEGINNING AND AT THE END OF THEIR STUDIES

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Abstract

The purpose of this longitudinal qualitative study was to examine and understand how the self-perceived entrepreneurial characteristics and competences of students were developed during a bachelor programme as well as what kind of relationship there was between the nature of goals and motivation at the beginning of the studies and the outcomes at the end of the studies. The findings indicated that typical characteristics and skills for business and entrepreneurship had been developed, although there were individual differences. It seems that the level of motivation as well as the nature of the goals in the studies were strongly related to the learning outcomes. In addition, the learning outcomes seemed to be connected with the nature of the goals in studies. Further, there seemed to be an obvious connection with the nature of the goals and motivation at the beginning and the outcomes at the end of the studies.

Key Words: entrepreneurial characteristics and competences, intention, students, perceptions, motivation

INTRODUCTION

Entrepreneurial learning concerns knowledge, skills, abilities and attitudes of actual or potential entrepreneurs (eg. Erikson 2003), yet there are multiple meanings how different scholars define entrepreneurial learning. Entrepreneurial learning can be related to the learning of current entrepreneurs (Cope & Watts 2000; Minniti & Bygrave 2001; Politis 2005; Ravasi & Turati 2005; Sullivan 2000; Taylor & Thorpe 2004). Further, during the last decade research on entrepreneurial learning in higher education has increased a lot. In that context, it refers to the learning of entrepreneurial knowledge, skills and attitudes of undergraduate, graduate or postgraduate students, when they are regarded as potential forthcoming entrepreneurs (eg. Leskinen 1999, Paajanen 2001, Ristimäki 2004, Dermol 2010). The concept of competence, in turn, integrates the personality and behavioural perspectives, and it is the synthesis of knowledge, skills, attitudes and personal qualities which can be used for

performing specific professional tasks. (eg. Nab, Pilot, Brinkkemper, & Ten Berge 2010, 22). In this study the competences refer to a student's overall capacity, behavior, knowledge and skills (Eraut 1999, 179), but this study does not regard the competences only as the learnt professional competences which should be possessed for a certain job performance (Gonczi 2003, 182) and they also comprise more generic competences of an individual.

In terms of entrepreneurial knowledge and skills, typically they are those which are needed in setting up and running a small business: strategy skills, planning skills, marketing skills, financial skills, project management skills, and time management skills (Leskinen 1999; Paajanen 2001; Ristimäki 2004). In addition, relevant entrepreneurial skills include a variety of skills required when dealing with people, such as leadership skills, motivation skills, delegation skills, communication skills, and negotiation skills (Kuratko & Hodgetts 2002). Then, in terms of entrepreneurial characteristics, there are a lot of positively valued characteristics related to entrepreneurship and entrepreneurial behavior. For example, they are being self-confident, persistent, creative, independent, flexible, dynamic and optimistic, as well as having need for independence, risk-taking ability, need for a achievement, uncertainty-bearing attitude, and sense of responsibility (Henry, Hill & Leitch 2003; Ristimäki 2004). In fact, the diversity of the features is large and some of them are related to the personality or in-born characteristics, while others are related to learning and growth. (eg. Ristimäki 2004; Gibb 2005). However, the entrepreneurial learning can be divided based on the contents and objectives as follows: the learning about entrepreneurship, the learning for entrepreneurship, the learning through entrepreneurial pedagogy, and the learning in an entrepreneurial environment (Kyrö & Carrier 2005, 28).

To understand the outcomes of entrepreneurial learning of the students, one should also be aware of the motivational aspects of a learner to achieve goals. According to the previous studies motivation is considered to be an important factor in a student's learning and achievement of learning goals (eg. Barkoukis, Tsorbatzoudis, Grouious & Sideridis 2008; Pintrich & Schunk 2002). However, it is worth emphasising that there are two contradicting goals in learning: mastery goals and performance goals. The mastery goals are related to learners' desire to develop their knowledge, understanding and competences, whereas in the performance goals learners desire to avoid demonstrating incompetence. (eg. Kuyper, van der Werf and Lubbers 2000, 183; Clayton, Blumberg & Auld 2010, 350).

Next, to continue with the concept of motivation, it can be regarded as a product or as a process. According to the theory of achievement motivation (Atkinson 1957; 1964), it is a product which has three components: motives (to approach success or avoid failure), expectancy (subjective probability of success) and incentive value (pride, affect, and a sense of accomplishment one will have for accomplishing a task) (Bembenutty 2010, 4). Based on that, a distinction can be made between three motivational components in learning: students' beliefs about the importance and value of the task (value component), students' beliefs about their ability or skill to perform the task (expectancy component), and students' feelings about themselves or their emotional reactions to the task (affective component) (Pintrich & McKeachie 2000, 33). Nevertheless, Pintrich and Schunk (2002, 5) regard motivation as a process rather than a product, since motivation is not observable directly and it is inferred from such behaviours as choice of task, effort, persistence and verbalization. In addition, motivation involves goals, at least something in mind that an individual is trying to attain or avoid.

In order to continue with the nature of motivation, according to the self-determination theory (Deci & Ryan 1985), there are three kinds of motivation: intrinsic and extrinsic motivation as well as amotivation (the absence of contingency between one's actions and outcomes). (Barkoukis et al. 2008, 40). Intrinsic motivation can be more associated with

challenges and enjoyments whereas extrinsic motivation is more related to affective responsivity to a competitive outcome (eg. winning or losing) (Abuhamdeh & Csikszentmihalyi 2009, 1615). Intrinsically motivated students are able to develop high regards for learning various types of course information without the inclusion of external rewards. Extrinsically motivated students, in turn, rely strongly on rewards and desirable results which act as a catalyst for their study motivation (Lei 2010, 153). Amotivated students do not seem to have specific purposes and goals, and they do not seem to approach ends in a systematic ways. They do not demonstrate the intent to engage in an activity. (Barkoukis et al. 2008, 40).

To conclude, in order to understand the outcomes of entrepreneurial learning of the students, it is also important to know more about the learners. For example, what kinds of learners are involved and what are their motivational components of learning as well as how they approach their learning goals. The purpose of this qualitative study was to examine and understand the development of entrepreneurial characteristics and competences of business students during a bachelor programme as well as the relationship between the nature of goals and motivation of the students at the beginning of the studies and the outcomes at the end of the studies. This qualitative study is a last sub-study for a longitudinal study which has followed the learning process and outcomes of one group of international business students in Finland during their degree studies in 2007 – 2010. This sub-study has also a longitudinal approach since it compares the start-up situation and the end-situation of the students. For this sub-study, four different student cases have been selected based on their self-perceived willingness to set up their own business after the graduation; which is called an entrepreneurial intention in this study.

DATA AND METHODOLOGY

Research questions

Based on the purpose of the study, the research questions were formulated as follows:

- * How are the entrepreneurial competences of business students developed during the degree programme?
- * What kind of relationship is there between the nature of the goals and level of motivation at the beginning and the learning outcomes at the end of the studies?

Since it is difficult to make a clear distinction between some of the entrepreneurial competences which are learnt during and based on the study programme and those which are developed outside the programme or through up-bringing and growth, in this study the concept of entrepreneurial competences consists of a student's overall capacity, behavior, knowledge, skills and characteristics (Eraut 1999, 179; Gonczi 2003) the students perceived to be their entrepreneurial competences. In addition, the outcomes at the end of the studies do not refer only to the learning outcomes, but also to their interest for further development and future plans based on their learning outcomes at the time of graduation.

Participants

The findings of Pihkala (2008) indicate that the intention of polytechnic (universities of applied sciences) students to set up one's own enterprise seems to be constant during the studies. Using that as a criterion, four different students were selected before their graduation based on their self-perceived intention of setting up a business in the future: no intention at all, maybe, yes later, and one had set up a business already during the studies.

The students had started their studies in the autumn 2007 and graduated in 2010 from the same business degree programme. All of them were good students in terms of the final grades of the courses; they had about 4 as the mean of the all grades in the degree (scale 1-5). The grades of the final theses were good (grade 3) or excellent (grade 5). Table 1 introduces the background characteristics of the cases which are called Tina, Clive, Anna and Bob in this paper.

Table 1: Background characteristics of the cases

	Tina	Clive	Anna	Bob
Gender	Female	Male	Female	Male
Entrepreneurs in the core family	Brother	Parents	No	Brother
Mean of the grades of all the courses of the study programme (1-5)	4.09	4.66	4.15	4.22
Grade of the bachelor thesis (1-5)	3	5	3	5
Self-perceived competences of business and entrepreneurship (the mean)*	2.22	3.22	4.00	4.56
Entrepreneurial intention after the graduation: asked in the beginning of the studies in 2007	NO	NO	YES	YES
Entrepreneurial intention after the graduation: asked before the graduation in 2010	NO – not at all	NO, - but maybe later	YES – but later	YES – had already set up a business

* in 2010 the students answered a survey of self-perceived competences of the study programme (scaling from 1- 5) which has been reported elsewhere (Kakkonen 2011)

Data collection and analysis

The longitudinal study during 2007 – 2010 has followed the entrepreneurial learning of the student group by using a mixed methods approach (Creswell & Clark 2011). The whole study consists of several sub-studies which have been published earlier or will be published soon. This study is the last part of the research and has a qualitative approach in order to capture the details of the topic addressed here. For this sub-study the data of the cases has been collected by the student names from the previous sub-studies in 2007, 2008 and 2010. The data collection and analysis procedures are presented next.

A triangulation of “between-methods” (Creswell 1994, 174; Brannen 1995, 11) was used in the study as follows: The qualitative data has been collected and analysed in four phases. First, at the beginning of the studies the students were asked to write about their expectations for their studies during the whole programme. The expectations were analysed and described according to the main themes. Next, also at the beginning of the first semester in 2007, at the end of the very first course of entrepreneurship the students were asked to write an essay about their personal features, skills, abilities, traits, and characteristics, and how they appear. The students were asked to regard them as strengths or weaknesses in terms of entrepreneurship, which was discussed during the course. These essays (1-2 pages) were analysed as follows: First, the data was divided into two groups based on the expressed strengths or weaknesses of the students and then they were analysed further and reported according to the main themes.

The third part of the data collection was carried out during an entrepreneurship course at the end of the first study year in 2008. It was a self-assessment task in which the students were encouraged to recall and describe their most significant learning experiences which relate to entrepreneurial behaviour and entrepreneurial skills and knowledge during their first year studies. They were asked to write an essay and describe the learning situations as detailed as possible (what and how did they learn, what happened, who was involved, etc.). The content analysis of the data had the following phases: First, all the essays (1-2 pages) were read and all pieces of texts describing the learning situations were selected from the essays. Some of the students had focused and described various events or learning experiences and their main outcomes, whereas some of the students described, for example, only two or three bigger learning experiences from different perspectives. In any case, the main principle of the analysis process was that each piece of text was regarded as one learning context which had at least one learning outcome and it was also described through which activities and how the learning had occurred. Based on the analysis, the nature of the learning goals and motivational components of the studies were revealed.

Then, the fourth part of the data collection consisted of the final situation and outcomes at the time of graduation in 2010, and it was collected in the thesis seminar: the students were asked again to write about their main characteristics, and business skills and competences they have learnt during their studies as well as what subjects they lack of or would like to develop further. In addition, they were asked to inform of their entrepreneurial intention and future plans. The data has been analysed and categorised according to competences (knowledge, skills or attitudes related to business and entrepreneurship as well as the "generic competences") they had. In addition, the competence they lacked or had interest to develop further was used as a category in the analysis. Finally, their future plans were described in each case in order to understand their entire situation at the time of the graduation.

The analyses and reports of the findings have been combined as follows: the findings related to the beginning of the studies and to the end of first year studies are combined in the same section of the findings. Then, the findings of the final situation have been analysed and reported in a separate section. Finally, the findings were compared with each other and the relationship between different factors was analysed across the four cases by using a cross-case comparison (Hennink, Hutter & Bailey 2011, 244), and eventually the research questions were answered.

Limitations of the study

The findings of this study improved the understanding of the development of the entrepreneurial competences of business students in higher education as well as the relationship between the nature of the goals and motivation, and the outcomes at the end of the studies. However, there are some limitations in the study which should be taken into consideration. First, the data of the study has been collected at the beginning of the programme, after the first academic year and then at the time of the graduation. In order to understand the development of the entrepreneurial competences during the whole programme, the qualitative data could be collected also during each academic semester. The second limitation of the study is the research method which was based on the self-evaluation by the students: how willing and able they were to write about their personal characteristics and learning, especially about their weaknesses and needs for further development. In addition, they were asked to write only the most important and significant characteristics and competences.

Further, it is worth emphasising that although the findings refer to the most important characteristics and competences during the studies, some of the entrepreneurial competences are related to personality or in-born characteristics, while some of them are related to learning and growth (Ristimäki 2004; Gibb 2005). In other words, since it is not possible to make a clear distinction which of them had been learnt or developed further during the studies and which of them were in-born characteristics, all the findings which were perceived to be learning outcomes by the students were included in the data.

Finally, one more limitation of the study is related to the nature of the findings. The findings of the study are perceptions of the students. In other words, they are not the competences which have been analysed and demonstrated in practice (Nab et al. 2010). Based on this study, it is not possible to evaluate how well these self-perceived characteristics and competences correspond with the actual competences at work. This could be examined in further studies. In addition, the perceptions of the students have not been interpreted during the analysis process case by case, but at the end of the analysis in order to explain the findings and draw the conclusions based on all the cases.

FINDINGS

Entrepreneurial characteristics and study goals at the beginning of the studies

First, the characteristics, motivational aspects and goals of each student at the beginning of the studies are described. Then the nature of the goals and the motivational components in learning in each case are demonstrated. Finally, Table 2 sums up these findings by the cases.

Tina: "Non-entrepreneur"

"...one weakness is lack of motivation. This I have in everything that needs to be done, from dusting or writing a letter to a friend, to preparing myself to an exam or writing a school report or essay. Everything is always done in the last minute and it's not because I'm so busy with something else, there might be nothing else to do but still there is no time for the important things."

Her strengths were especially in group works skills, and she really enjoyed group work. In addition, she perceived herself to be a hard working person who liked new things in life. Further, she perceived that whatever she had started doing she had finished it and finished it well. However, she needed guidance almost in everything she did. She perceived that one of her biggest weaknesses was definitely the lack of self-confidence. She did not believe that she was good at something or that something she had done was good, until someone said it to her. Further, if something was too difficult or she did not succeed in it, she easily stopped trying and gave it up, because she did not see a reason to do it without a good outcome. She claimed to be an extremely complicated person and stubborn to its limits. Further, one of her big weaknesses was the lack of motivation. She claimed that based on it everything was always done in the last minute.

In terms of motivational components, the expectancy component of motivation was seen to some extent in doing different tasks and their schedules. She usually planned her schedules "around the dead-lines of the tasks, not when it is a good time to do them". Further, she argued not having any expectations for the grades, yet she was not happy with the low grades. She perceived that the grades and the degree had driven her to study. Further, the lack of expectancy component was seen as follows: She perceived that she did not know what business means to her or to her future. She argued that she was not able to see how

to plan her own development; therefore she needed someone to help her with it. She emphasised that it was not possible to say where she will end up after her graduation, but she was looking forward to getting to know different points of view in business.

In fact, the lack of motivation, an amotivation, for business and entrepreneurship studies was seen of at the beginning of her studies as follows: she perceived that if she wanted to have a better future, she had to study and get the degree to get further with her life and get a career. However, she had questioned everything she heard at school: where did she need this, did she really have some use for this information in the future, etc. Her motives and expectations for the studies were still unclear to her. She claimed that she was studying because she wanted to have a future in the international environment, although she had doubts whether she as a person was enough business-focused. She claimed not to be interested in entrepreneurship at all. To conclude, it seemed that she studied mainly for the grades and the degree, but not for the business and entrepreneurship competences. The extrinsic motivation was dominant for her.

Clive: "Potential entrepreneur"

"As far as I remember me, I have been keen on business and business related themes. Maybe there is a connection with my background, as my parents act as entrepreneurs. I have always asked them about details of particular business actions and decisions which they made. Consequently, I recognize that I will build my future career in the area of business. "

He perceived to have a strong desire to achieve, to create something that he could be proud of. Moreover, he wanted to be the first in everything that he did. Consequently, he was rather competitive. Further, he had a desire to constantly learn new things and acquire skills. He explained that he had learnt best from his mistakes and previous experiences. He argued that he could handle different processes as a complex structure, however simultaneously paying enough attention to important details. Nevertheless, there were weaknesses that he wanted to reduce. Firstly, he was not a very flexible person. To him flexibility meant different ways of fulfilling tasks. Secondly he wanted to develop his communications and organization skills. He perceived that he was not particularly good in motivating people. Furthermore, he wanted to train himself to find positive sides in people around him, to trust in their potential and abilities.

The value component and affective component of motivation seemed to be dominant in his learning. He had always been interested in business and entrepreneurship. He perceived that maybe there was a connection with his background, as his parents worked as entrepreneurs. However, he perceived that he was not ready to accept the whole range of responsibilities of an entrepreneur. He considered his future career in the area of business very important and he had decided to concentrate on international business. Nevertheless, he still sought in which business subjects he should put his efforts. He had high need for achievement and was highly motivated in his studies. His learning expectations were related to such business disciplines as marketing, finance, strategic and risk management as well as entrepreneurship.

Anna: "Future entrepreneur"

"I want to get all the possible information to become a good businesswoman, because in the future I want to have my own company or to work in some international company to participate in trade relations. I need to develop myself and to improve my education to get all important features to become an entrepreneur. I hope that I will develop all the

necessary characteristics and features while studying here, because in the future I would like to set up my own business and to be an independent entrepreneur. "

She perceived herself to be a good organizer of the working and planning process. She organised her study process very well, she was punctual and did all the necessary things in time. She was very communicative and social. She was able to work hard, to take initiative in the situations requiring it. In addition, she preferred to work independently with using her creativity, where she could do her work as she wanted to. However, it did not influence on working in groups, because she was also a flexible person to work in a group, when it was needed. Further, she perceived that one of her good personal traits was responsibility. She emphasised that she was very responsible for all her decisions and words. As a weakness she mentioned oratorical skills, and therefore she wanted to learn how to speak in front of a public successfully, briefly and clearly.

Although she had also the performance goals, the mastery goals were dominant in her studies. In principle, she wanted to learn "all possible things" during the studies. She wanted to get all the possible information to become a good businesswoman, because in the future she wants to have her own company or to work in some international company. Further, she seemed to have the value component in her study motivation. She wanted to get skills in doing different kinds of projects and to communicate well with people in each business situation. In addition, she perceived that she needed to learn a lot to become a good entrepreneur. She wanted to know how to sell, how to sell successfully and how to make profit, how to provide products to customers, and how to attract customers. To summarise, she was a punctual, responsible, communicative and social person, and she preferred working independently. She had the performance goals and the mastery goals in her studies.

Bob: "Entrepreneur"

"I have always been interested in business. I want to be an entrepreneur and I think this degree programme will equip me with the tools I need to succeed in the business world. After completing this programme I want to work for companies in order to gain some hands on experience, which will come in handy when starting my own business in the future."

He perceived that his greatest competences lied in the areas concerning international environments. His family was international (six different nationalities in the close family) and due to such a multicultural foundation he considered international competence as one of his personal strengths. He claimed that he often struggled at staying focused. He was also impatient and wanted sometimes to see things happen faster than they did. He found it difficult to wait since he wanted instant results. On the other hand, he knew that this was something which will be dealt with and also will be beneficial in the fast paced business world.

The mastery goals seemed to be dominant in his studies. He perceived that he wanted to become an entrepreneur and he believed that the degree programme equipped him with the tools needed to succeed in the business world. He expected that the degree programme included a lot of training in personal and professional development. Actually he expected to acquire all the fundamental skills he needed to enter into the world of international business. In terms of motivational components, the affective components could be recognised as follows: He perceived that he had always been interested in business. He considered that the business management degree was a "fantastic" opportunity; one which he wanted to make the most of. Also the value component was emphasised since he regarded the Finnish education as great. He took the education seriously and said to be thankful to be able to study in this university of applied sciences. The achievement motivation seemed to be

obvious in his learning, since his motives were to be successful in all he does. To sum up, he had strong multicultural competences. He had a high need for achievement and he wanted instant results. The achievement motivation was strong and he had mastery goals in his learning.

Table 2: Strengths, weaknesses, goals and motivation of the students

	Tina	Clive	Anna	Bob
Strengths / positive features	Hard working Likes new things Group work skills Able to finish what has started	High need for achievement Wants to the best; competitive Willing to learn new things Sees "big pictures", yet can also focus on details.	Good organizer Punctual Good communication and social skills Hard working Initiative taker Independent Group work skills Flexible, responsible	International competence High need for achievement Ability to get fast results
Weaknesses / areas which could be reduced	Stubborn Lack of confidence Gives up easily Lack of motivation	Not very flexible Social, communication and organizing skills. Unwillingness to take full responsibility.	Presentation skills	Not always able to stay focused Impatient
Learning expectations	Not specific expectations.	Social and communication skills. Flexibility. Marketing, finance, strategic and risk management. Entrepreneurship.	All relevant business and entrepreneurial competences. Project management. Marketing. International business. Presentation skills.	Personal and professional development. International business.
Nature of goals in the studies	Performance goal dominant	Mastery goal dominant	Mastery goal dominant	Mastery goal dominant
Motivational components in the studies	Expectancy component in doing tasks & Lack of expectancy component – needs somebody to say that she is able to perform a task.	Value and affective components are dominant – highly interested in entrepreneurship and business. Achievement	Value component – considers it important to get the skills which are required in the international business	Affective and value components - always been interested in business and considers this programme a great opportunity to get the competences.

	Instrumental, extrinsic motivation - for the grades and the degree, not for the business competences.	motivation – wants to be the best in everything.		Achievement motivation - his motives are to be successful in all he does
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To sum up the key findings of the students' strengths, weaknesses, goals and motivation, it can be concluded that there were some similarities as well as differences between the cases. Tina was hard-working and liked new things; however she did not have any specific expectations for her studies. She was able to finish different tasks, however she easily gave up. She lacked a basic motivation for her studies and had a performance goal in learning. Clive and Bob had the high need for achievement and had the strong study motivation in order to learn and master the learnt things. The value and affective components of motivation were dominant in their learning. Anna, in turn, was a hard-working and punctual initiative taker. She had the value component of motivation and the mastery goal as dominant in her learning.

Entrepreneurial competences of the students at the time of graduation

First, the characteristics and competences of each student are described. Then Table 3 sums them up and presents also the interest for further development as well as the future plans of the students.

Tina: "Non-entrepreneur"

"Always when owning a business, there is a risk of losing everything: money, reputation, family and nerves, no matter what the environment is. In the end I am not a big risk taker. I like to live spontaneously and take insane risks, like jumping out of an airplane with a parachute on my back, but not big life changing risks like being responsible for a company. I like to have a boss, that someone to turn to in a tricky situation and someone to give me tasks to do. "

At the time of the graduation, in terms of having learnt business competences, she perceived that she had received knowledge of business cultures and how people work in them. In addition, she had got the basic knowledge of accounting, marketing and entrepreneurship. In fact, she perceived that that she had learnt general business knowledge in many topics: all the facts about business, business operations, different types of companies, risks and managing them etc. In terms of learnt skills, they were presentation skills, interviewing skills, and academic writing and reporting skills. In addition, she had learnt responsibility and organization skills with the tasks and their dead-lines as well as persistence with the longer tasks and exams. Especially group work had taught her adaptability and organization skills. She perceived that she had learnt a realistic way to look at herself; ie. there were different kinds of people with different kinds of skills.

Nevertheless, she explained that she had lost a specific goal in life. Actually, she was quite uncertain what her skills really were, and what she could achieve in life. She perceived that she needed support from others in order to understand that she could do tasks or was good at something. According to her perception she had a low self-confidence. Further, she argued that she did not know what she should do in practice, if she actually wanted to start a business (where to contact, what papers to fill, how to do accounting in a real firm, etc).

She also perceived not having achieved a deeper knowledge or understanding in any specific field of business. She concluded that she might have studied in a wrong field of studies or just in a wrong time in life. However, she emphasised that nothing in the studies had been bad or for nothing. At the moment, her future plans were to apply to military service and then continue from there to do peace keeping service.

Clive: "Potential entrepreneur"

"Confidence in personal abilities is one of the main outcomes of my study period here. In fact, I regard my rather successful studies as an achievement. And this sense of achievement gives me, on one hand, confidence in my abilities, and, on the other hand, it pushes me to go forward - if I can finish my tertiary education in a foreign language in a foreign country successfully, so I can do other, more challenging tasks in my life, right? It gives me a sense that I am the creator of my future..... my entrepreneurial intention? No, not yet. I prefer to get extra work experience. Nevertheless, I always remember that I have a possibility to start my own business. Knowledge and skills I received will certainly be beneficial if I ever want to start my own business."

At the time of the graduation he perceived that the ability to live, study and work in the intercultural atmosphere was one of his main strengths, and this strength had been developed only due to his studies. While studying, he had had to communicate and interact with people from different cultural backgrounds. Further, communication skills were the most important feature he had acquired and developed during his studies. In addition, stronger self-confidence was one of the main outcomes of his study period. He had learnt and received knowledge especially about entrepreneurship, about accounting and marketing. In addition, he had also learnt a variety of skills: group work skills, presentation skills, communication skills and social networking. He had learnt the following teamwork and leadership skills: the importance of leadership, when a true leader can successfully guide the group of team members and motivate participants to work better and achieve better results and outcomes. Finally, he emphasized that he had learnt the unique feeling of sharing the responsibility, when each team member is responsible for the results of the whole group work. In terms of having developed his attitude toward entrepreneurship, he perceived that his attitude was more realistic than what it used to be. He had also learnt that there should be a balance between the goals and resources (eg. time and knowledge) and he should not give up easily (persistence) when doing assignments.

In terms of further development, he perceived that leadership skills were the skills that he could improve considerably. Even though the programme provided an overview of major aspects, he wanted to have more in-depth knowledge of some aspects which were of special interest for him (eg. finance and accounting). Therefore, he wanted to continue with master studies in order to get acquainted with more advanced topics. He explained that he wanted to continue his education in Finland, as he respects the level of education here.

Anna: "Future entrepreneur"

"My entrepreneurial intention. Yes... in ten years, when I have experience enough. It will be in the hospitality field, I will set up a hotel in Finland. As to my own features and abilities as an entrepreneur I hope that I have enough of them, because I really would like to work in that field and become an entrepreneur."

She perceived that she was a positive, determinant, and responsible person. She was able to finish all things on time, although she sometimes left things to the last minute. Before the decision-making, she always thought of positive and negative sides first, making the decision

after that. She argued that she had good language skills and good social and communication skills. Nevertheless, sometimes she could have been too talkative. Further, she perceived that sometimes she was afraid to present her own ideas and thoughts, as well as being too stubborn to consider other people's ideas. She had learnt much knowledge of entrepreneurship and business: different types of companies and their categories, business forms, basic knowledge of business and management, the business idea, competition and risks in the business field and important details in business. Further, in terms of having learnt various skills, the most important ones were group work and presentation skills, and social and communication skills. Further, a significant experience had been a big assignment in which the students had to create a company and manage it. The students needed to think of many aspects in business, such as financial aspects, recruitment of employees, purchasing different factors for production. Her future plans were related to master studies first in Sweden. However, she started working in a hotel in Finland in order to get work experience. She perceived to have a strong entrepreneurial intention in order to start a hotel in Finland in ten years.

Bob: "Entrepreneur"

"The teachers here encourage and foster entrepreneurship and entrepreneurial learning. Being in an environment where entrepreneurial learning can be nurtured, brings about many advantages. University of applied sciences is a great environment for students to recognize the value in their ideas, and to understand the reality of the risks involved. It is great how the teaching here is not hyped up, it remains on a realistic and practical view of the business world. ... I have, with a friend, we have actually started the business. It is a part time project on the side, while we study. The business has just been set up and we have learned a lot about setting up a company in Finland."

He perceived that he had acquired new skills in business and his eyes had been opened to the world of business during the programme. Further, he had learnt that it was important to understand the reality of the risks involved. He had also had to change his attitude and approach towards the assignments. For example, in writing essays he had learnt to reflect and write about himself. In his home country he was taught to never be self-centered, since self-centeredness was seen as a negative trait. He had learnt how to do it in a correct way. All in all, he had learnt a realistic and practical view of the business world. He had learnt a lot about setting up a company in Finland. After having learnt the basics of entrepreneurship and business planning he had set up a business with a fellow student at the end of the first academic year. He perceived that ever since he had learnt all the things for the company and through the company. He had learnt in practice how to manage and run the business. The motivation had been the ability to grow as an individual, learn how a business is set up, how it is run and all that is involved in it. He had to learn to make the contracts and also to evaluate whether the sales force was able to make sales at an efficient rate. Due to the increased number of projects, the next step was to increase web developers and programmers. Human resource management was the area to be learnt in practice. He explained that he had to learn "the tricks and the trades" of the design industry and maintained the company at an innovative pace by researching the latest web technology in order to provide the best to its clients. This had included in-depth research on new industry standards and guaranteeing clients high standards. To conclude, his future plans were related to continuing and developing business with his business partner and working in the company on a full-time basis. He perceived that "the future looked promising for the business founded by two business students".

It can be concluded that the learning outcomes of the students differed at the time of their graduation. Tina had learnt basic knowledge of business and entrepreneurship as well as different communication skills. She still had a low self-confidence and she felt not being aware of her actual learning outcomes. However she lacked advanced competences of business and entrepreneurship. Clive and Anna had learnt different kinds of knowledge about business and entrepreneurship as well as different kinds of skills for business operations. Both of them were willing to achieve deeper knowledge and skills by continuing their studies at a master level as well as by having work experience in their fields. In addition, Anna had an entrepreneurial intention at the beginning of the studies and is still willing to set up her own business later in the future. Bob had learnt all the relevant things for and through his own company: how to set up a business, how to run it, how to lead and manage it in practice. He had been highly motivated to learn and master those topics in order to succeed with his company.

Table 3: The perceived outcomes of the students at the time of the graduation

	Tina	Clive	Anna	Bob
Knowledge of business and e-ship	Basic knowledge of business and its operations.	Knowledge of accounting, marketing and entrepreneurship.	Knowledge of business and entrepreneurship.	Special features and standards of the business industry.
Skills of business and e-ship	Communication skills: such as presentation skills, interview skills, academic writing and reporting skills.	Business planning skills Group work skills presentation skills, communications and social skills.	Decision-making skills. Language skills Group work, Social and Communication skills Presentation skills	The skills for and through the company: how to set up a business, how to run a business. HRM skills.
Attitudes		More positive attitude towards entrepreneurship		Attitude for learning skills.
Generic competences	Sense of responsibility Group work and organization skills Persistence; adaptability. A realistic way to look at herself	Good multicultural competences Strong self-confidence Ability to share responsibility. Ability to assess his own goals and resources.	Positive, determinant and responsible individual. Punctuality.	Grown as an individual
Lack of skills or need / interest for further development	Low self-confidence Lack of deeper knowledge and skills in business. Not aware of her own actual business skills, but not any interest in	Interest for developing leadership skills and advancing the knowledge in accounting and finance.	Interest to learn more advances business studies.	Interest to continue personal development in his own business.

	further development.			
Future plans	Plan to apply to military service and then continue to do peace-keeping service.	Master studies. Need to get work experience.	A work place in a hotel. Plan for master studies. Strong entrepreneurial intention to start a hotel.	To develop business with his business partner and work in the company full-time basis.

DISCUSSION AND CONCLUSIONS

The purpose of this qualitative study was to examine and understand how the entrepreneurial characteristics and competences of business students were developed during a bachelor programme as well as what kind of relationship there was between the nature of goals and motivation in the beginning of the studies with the outcomes at the end of the studies. In order to summarise the findings related to the development of the entrepreneurial competences, it seems that the typical entrepreneurial characteristics and skills for business and entrepreneurship had been developed (Leskinen 1999; Paajanen 2001; Ristimäki 2004), although there were individual differences. Further, it seems that the level of motivation as well as the nature of the goals in the studies were strongly related to the learning outcomes (eg. Barkoukis et al. 2008; Pintrich & Schunk 2002). In the end the learnt entrepreneurial competences, ie. knowledge, skills and attitudes towards entrepreneurship, relate also to the expectations of the students in the beginning. The findings of this study also illustrated that if a student was motivated and willing to learn and master various and specified knowledge and skills, he or she seemed to achieve them better. In addition, the learning outcomes seemed to be connected with the nature of the goals in studies: A performance goal drives and ends-up with basic knowledge and skills, whereas a master goal drives for more advanced skills for business and entrepreneurship. (Kuyper et al. 2000, 183; Clayton et al. 2010, 350). The findings indicated that the entrepreneurial intention was a driving force for the development of the entrepreneurial competences, and vice versa.

Further, in order to answer to what kind of relationship there is between the nature of the goals and motivation at the beginning and the outcomes at the end of the studies, it can be presented that based on this qualitative study, there seemed to be an obvious connection with them. The student, who was considered an amotivated student (Barkoukis et al. 2008, 40) in terms of business and entrepreneurship, had a lack of expectancy component of motivation and had a strong performance goal in her studies, she seemed to be very uncertain of her actual business skills and competences at the time of the graduation. She seemed to have a strong extrinsic motivation in her studies. The students, who had value and affective components of motivation at the beginning of their studies, were willing to achieve all the needed competences for their career in the international business, and they perceived to be quite pleased with their learning outcomes. They had mastery goals dominant in their studies and intrinsic motivation seemed to be a catalyst for their learning (Lei 2010, 153). Further, they did not have so much interest in further development in business studies in terms of quantity, but the quality: they were interested in continuing their studies at a master level. In addition, it seemed that the student, who had set up a company during his studies, had learnt most the entrepreneurial competences as well as grown as an individual. Since having set up a business, he had learnt the relevant

entrepreneurial skills for and through the company (see Kyrö & Carrier 2005, 28). The achievement motivation was to master everything in practice and to be successful in the real business.

To conclude, the self-perceived entrepreneurial intention was used as criterion to select the different cases for the study. However, the findings of this study illustrated that the entrepreneurial intention seemed to be stable during the studies, which supports the findings of the previous findings (eg. Leskinen 1999; Pihkala 2008). Further, the findings of this study illustrated that the entrepreneurial intention seemed to be connected with the nature of the goals (performance vs. mastery) and the nature of motivation (intrinsic vs. extrinsic). However, how strongly these factors are involved and how much they are related with each other, are important aspects that need further studies. Nevertheless, to start with, Table 4 presents a proposition of the relationship between the nature of the goals and the entrepreneurial intention.

Since this study was a last part of the longitudinal study which followed the learning process and outcomes of one group of students in 2007 – 2010, the conclusion can be drawn related to the whole student group as well. The group consists of 20 students who have graduated or will graduate soon. The students can be divided into four categories introduced above. First, they were divided in two categories based on their self-perceived entrepreneurial intention, and then based on their nature of the goals in their studies. It is worth emphasising that the latter is based on the interpretation of the all the data of the study as well as observations and the discussions with the students during the study years. Nevertheless, it provides an insight into the issue how the whole programme has influenced on the entrepreneurial learning of the students.

Table 4: Relationship between the nature of the goals and the entrepreneurial intention of the students

		Entrepreneurial intention	
		Low	High
Nature of goals	Mastery goals	"Potential entrepreneur": high expectations for the studies in the beginning strong interest in personal growth and the development of business competences high motivation in studies "Clive" as an example Three of 20 students (15%) were Potential entrepreneurs at the time of the graduation	"Entrepreneur" (during the studies): high expectations for the studies in the beginning strong interest in personal growth and the development of entrepreneurial competences high motivation in studies "Bob" as an example Two of 20 students (10%) were Entrepreneurs at the time of the graduation

Performance goals	<p>“Non-entrepreneur”: (quite) low expectations for the studies in the beginning low interest in personal development in terms of business and entrepreneurial competences, but mainly interest in the grades and the degree low motivation in studies</p> <p>“Tina” as an example” Eleven of 20 students (55%) were Non-entrepreneurs</p>	<p>“Future entrepreneur”: motivated for becoming an entrepreneur, yet insufficient entrepreneurial competences interest in personal development in terms of business and entrepreneurial competences, but strongly interested in the grades as well (quite) high motivation in studies</p> <p>“Anna” as an example Four of 20 students (20%) were Future entrepreneurs</p>
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Practical implication for higher education

Finally, it can be concluded that since there are differences what the students really learn and since there seems to be a connection with motivational components, the learning goals and the outcomes, it should be paid more attention to. In other words, the motivational factors should be taken better into consideration in the beginning of the studies. The students could be encouraged and motivated better in order to have more master goals and achieve the competences, not only having performance goals to pass the courses and to get good grades. Anyway, it seems also that more complicated objectives might be beneficial for the development of the entrepreneurial competences. Eventually they will demonstrate in practice the competences what they really will master at work and are able to do at work (Nab et al. 2010) or when setting up and running their own businesses after the graduation.

Based on the findings of this study, it can also be concluded that setting up a business is really significant for the learning motivation and outcomes (see Kyrö & Carrier 2005) in entrepreneurship. It seems that then the learning goal is strong since all the learnt knowledge, skills and competences are learnt for the real need as well as the success in business will be based on these competences. Nevertheless, of course the students should be able and willing to set up a business during their studies before encouraging them to do so. Therefore there is a practical contradiction – how to know when a student knows and masters enough of the business and entrepreneurship, and has enough entrepreneurial competences to set up his or her own business, in order to learn more entrepreneurial competences for and through the running of a company. However, there might be possibilities for this kind of learning context to several students. The students who have a strong entrepreneurial intention already at the beginning of the studies as well as strong motivation and mastery goals in their studies, could be encouraged more to consider that setting up a business is worth doing already during their studies.

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SHADOW ECONOMY IN THE WOOD INDUSTRY IN SLOVENIA

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Abstract

This paper investigates the impact of the reduction in the number and size structure of large enterprises in the wood industry on the dynamics of the shadow economy in the wood industry in Slovenia. The empirical results show that the dynamics in the reduction of the number and size structure of large enterprises in the wood industry significantly contributes on the increasing share of the shadow economy in the wood industry. The most important decision factors to participate in the shadow economy are the level of taxes and contributions, opportunities for better earnings and tax regulations. The estimated share of the shadow economy in the wood industry is 21.7%. As the basic solutions to reduce the share of the shadow economy and to speed up the dynamics of the entering of small enterprises in the wood industry are improved regulation system to provide better incentives to operate within the formal sector and better access for necessary financial capital at acceptable guarantees. As important are also good practices by the state institutions by providing incentives for entrepreneurship and encouraging decisions for the setting up of an enterprise.

Key Words: Shadow economy, firm dynamics, wood industry, Slovenia.

INTRODUCTION

The research investigate the impact of the changes in the number and size structure of large enterprises in the wood industry in Slovenia on the share of shadow economy, and the most frequent reasons for operation in the shadow economy. The previous studies have largely investigated the shadow economy for the manufacturing sector activities as a whole. Few studies have investigated the shadow economy in the literature (e.g. Glas 1991; Kukar 1995;

Ott 1998; Feige et al. 1999, 2008; Fleming et al. 2000; Smith 1994; Flajs and Vajda 2004; Schneider 2005, 2007; Nastav and Bojnec 2007, 2008; Nastav 2009). In addition to the review of the previous studies on the shadow economy, in the empirical part we analyse the results of our research on the sample of micro and small enterprises, which operate in the wood industry in Slovenia. The empirical results indicate in what degree and in which ways the changes in the number and the importance of large enterprises in the wood industry have caused the changes in the shadow economy.

THEORETICAL BACKGROUND AND MAIN STYLIZED FACTS

In general two main streams of literature exist regarding the definition of the shadow economy. The first view considers the shadow economy as an unregistered economic activity, while the second view basis on a temporary characteristics of economic behaviours (Fleming et al. 2000). The aims to generalise different definitions of the shadow economy in most cases is based on these two streams of literature. Thomas (1999) suggests that for the shadow economy activities are considered all those activities, which are not, but should be included into the national revenues. Schneider and Enste (2000) define the shadow economy as all economic activities, which should be calculated in the national gross domestic product, but due to different reasons are not. Smith (1994) defines the shadow economy sector as legal or illegal, on market demand based production and service activities, which were avoided in the estimate of the national gross domestic product. Nastav and Bojnec (2007) under the term of the shadow economy include all those economic activities, which are legal, but are not under a control of institutions, which are managing with them.

The main reasons for the shadow economy both in developed and transition economies and developing countries are higher taxes and contributions for social insurance, moral of the people and the degree of the state regulation. Higher taxes and contributions explain 35 to 38% of the reasons for the appearance of the shadow economy, more strict tax regulations 8 to 10% and tax moral 22 to 25% of the reasons for the shadow economy (Schneider 2005).

Impact of the shadow economy on the economy

The shadow economy has negative and positive impacts on the economy from the economic and social points of view. These impacts are reflected in a form of less charged taxes of responsible institutions, in impacts on less competitive enterprises, which are operating in the formal sector of the economy as well as on the side of consumers, which usually do not have guarantee for products and services. On the other hand enterprises, which are operating in the shadow economy, they operate with lower costs and they can employ more people, which might do not find employment in the formal sector. Consumers can have lower costs for purchases of goods and services, which are caused by bureaucratic and administrative barriers and might not pay value-added taxes. The shadow economy can also play a specific incubator for small enterprises, which at the early beginning operate in the shadow economy (e.g. Schneider and Enste 2002; Smith 2002; Nastav and Bojnec 2008).

Shadow economy in Slovenia and in some developed countries

As can be seen from Table 1 in most of developed countries the share of the shadow economy is between 8% and 30% of gross domestic product. Moreover, the share of the shadow economy in developed countries is lower than in transition economies and in developing countries. The shadow economy in general represents a part of gross domestic product, which should be considered in formulation of the economic policy.

Table 1: Share of the shadow economy in some developed countries

Country	Share of the shadow economy in % in gross domestic product in the period 1999–2003
Greece, Italy,	24–30%
Sweden, Norway, Denmark, Ireland, France, Spain, Netherlands, Germany, England, Portugal, Belgium, Finland	12–23%
Japans, Austria, Switzerland, USA	8–11%

Source: Schneider 2007.

Slovenia is rarely included in the studies of the shadow economy. Most often it is referred in researches of the shadow economy in transition countries or in associated members of the EU. Empirical results of different studies often vary due to different used definitions and methodologies, which very often prevents their comparisons. The study conducted by Schneider and Enste (2003) reports that 26.7% of gross domestic product is generated by the shadow economy in Slovenia in the period 2000–2001. They consider all those economic activities, which are administratively organized and should be normally taxed. In the study conducted by Schneider (2004) on the sample of ten new members of the EU is also included estimation of the share of the shadow economy in the officially reported gross domestic product in Slovenia in the period 1999–2003. According to his estimates the share of the shadow economy is between 27.1% and 29.4% and tends to increase.

Nastav and Bojnec (2007) report that the share of the shadow economy in registered value added by different economic activities in Slovenia vary and tends to increase. The average estimate of the share of the shadow economy in gross value added in Slovenia was in the year 1995 between 18.9% and 20.8% and increased by the year 2000 from 20.4% to 22.5% of the registered gross domestic product.

Shadow economy and dynamics of enterprises

European Commission (2004) and OECD (2002) argue that there is a direct association between micro and small enterprises on one hand and the shadow economy on the other. The finding is based on a fact that small enterprises are more flexible and easier avoid unfavourable legislation and administration and therefore easier hidden a part of their activities, which are performed in forms of the shadow economy. Moreover, high taxation obligations and other regulatory and administration limitations are causing the increases in the share of economic activities, which are performed in the shadow economy (Johnson et al. 2000). In a spite of this there is not possible to associate a positive dependent of the dynamics of entry and exit of enterprises only with these impacts. Taxation limitations, labour market regulations, administrative transaction costs, investment climate, income inequalities and some other factors can also have impact on the dynamics of entry and exit of enterprises as well as on the share of the shadow economy (Schneider and Enste 2002, Bartlett et al. 2005).

The relation between the rate of unemployment and the dynamics of entry of new enterprises particularly with an aim of self-employment can also have positive effects on the dynamics of entry, and vice versa (Audretsch et al. 2005). First, unemployment individuals are willing to establish own enterprise in the case of low opportunity costs of self-employment (Evans and Leighton 1990). Second, high rate of unemployment has for implication the higher share of activity, which is conducted in the shadow economy, which is

associated with low rate of the dynamics of entry of new enterprises. Third, positive dynamics of entry of new enterprises have impacts on the reduction of the shadow economy and the rate of unemployment (Storey 1991).

Wood industry

Wood industry is included among manufacturing activities. Its main activity is production of processed wood and wooden plates, then production of furniture, construction furniture, and other products made from wood. For wood industry in Slovenia is typical a high concentration of enterprises: 1% of enterprises contribute 25% of total revenues, the first 3% of largest enterprises contribute 50% of total revenues in the wood industry in Slovenia.

In 2006 in the wood industry operate 2,586 enterprises and individual entrepreneurs (SURS 2007), which means 14.2% share of all enterprises in the manufacturing activities. In the same year the gross value added per employee in the wood on average amounted to 19,403 euro, which is a bit more than 67% of value-added per employee in the manufacturing activities, which on average achieved 26,974 euro, and only a bit less than 64% of gross value added per employee in the economy as a whole, which on average achieved gross value added per employee 30,408 euro (SURS 2008).

The comparison of the wood industry in Slovenia with the wood industry in the EU-27 shows that Slovenia with 19,403 euro of value added per employee achieved a bit less than 75% of average value added per employee in the EU-27, which amounted to 25,885 euro. The wood industry has important contribution in the Slovenian economy employment and value added, but the productivity in the Slovenian wood industry on average is lower than in the EU.

METHODOLOGY AND DATA

The collected data from the existing secondary data bases are analysed by descriptive statistics and multivariate factor analysis. In addition, at the end of 2008 the primary data for the sample of enterprises are collected using the written questionnaire, which was sent by post-mail with a pre-paid post mark and envelope. The written questionnaire contains from a short, mostly closed-type of questions. The possibility for a selection of answers was based in a form, which is known as a Likert's scale-type. The respondents were asked to select one out of five possible answers. The selected answer indicates the degree of agreement or disagreement with the possible opinion (Easterby-Smith, Thorpe and Lowe 2005).

We include statistical population of micro, small and large enterprises, which operate in the wood industry in Slovenia. In 2007, the statistical population contains 3,324 micro and small enterprises and 18 large enterprises (Table 2). The investigation of statistical population is based on a statistical sample, which includes 700 statistical units in population of micro and small enterprises, which represents almost 21% of total population of micro and small enterprises in the wood industry in Slovenia. On the written questionnaire we received 168 answers of enterprises out of 700 in the sample randomly selected enterprises to the written questionnaire was sent. This means that we received 24% of successfully completed written questionnaires. Among the participating enterprises are by legal-organization forms 60.7% independent entrepreneurs, 33.9% associations with limited responsibility and in 3.6% share-holding company.

Table 2: Population of micro, small and large enterprises in the wood industry by Standard Classification of Activities, Slovenia, 2007

	Number of enterprises		Number of employees	
	DD20	DN36	DD20	DN36
Micro enterprise (0 – 9 employees)	1,520	1,568	3,030	3,139
Small enterprise (10 – 49 employees)	119	117	2,326	2,524
Total micro and small enterprises	1,639	1,685	5,356	5,663
Large enterprises (more than 250 employees)	6	12	3,385	5,212
Total population	1,645	1,697	8,741	10,875
Note: Standard Classification of Activities DD20 – Manufacture of wood and wood products; DN36 – Manufacture of furniture, manufacturing not elsewhere classified.				

Source: SURS 2008a (SI-stat).

ANALYSIS OF THE SHADOW ECONOMY IN SLOVENIA

We investigate the impact of the changes in the number and size structure of large enterprises in the wood industry in Slovenia on the share of the shadow economy and most frequent reasons for participation in the shadow economy. The starting point of the analysis is theoretical and empirical findings of the shadow economy (e.g. Schneider 2004, 2005, 2007; Feige and Ott 1999; Nastav and Bojnec 2007, 2008; Nastav 2009).

Analysis of the impact of the dynamics of large enterprises on the share of the shadow economy

The presence of the shadow economy is visible particularly in activities, which require relatively smaller investments into technological equipments and buildings. In a difference from the formal sector, which is burdened with taxes and regulations, the shadow economy is dynamic and adjustable (Schneider and Enste 2002).

We investigate the impact of the reduction in the number of large enterprises on the share of the shadow economy in the wood industry using the questionnaire. We find that the reduction in the number of large enterprises in the wood industry causes the number of people working in the shadow economy. The average value of 3.89 by the Likert's scale – from 1 as very unimportant to 5 as very important – shows relatively important positive impact of the reduction in the number of large enterprises on the increase of the shadow economy (Table 3). Similarly, the reduction in the size structure of large enterprises on the shadow economy in the wood industry shows relatively important positive impact on the increase in the shadow economy with the average value of 3.82. Therefore, the reduction in the number and in the size structure of large enterprises in the wood industry increases the share of people working in the shadow economy.

Table 3: Analysis of responses for impact of reduction in the number and the size structure of large enterprises on the share of the shadow economy in the wood industry in Slovenia, 2009

Interval of opinions for its average value (Likert's scale from 1 to 5)					
Notes on opinions: 1 – very unimportant; 2 – unimportant; 3 – neutral; 4 – important; 5 – very important					
Opinions	N	Average value	Modus	Median	Standard deviation
Impact of reduction in the number of large enterprises on the share of the shadow economy	165	3.89	4	4.00	1.093
Impact of reduction in the size structure of large enterprises on the share of the shadow economy	165	3.82	4	4.00	0.977

Table 4: Analysis of opinions for impact of labour price on the share of the shadow economy and dynamics of exit of small enterprises in the wood industry in Slovenia, 2009

Interval of opinions for its average value (Likert's scale from 1 to 5)					
Notes on opinions: 1 – very unimportant; 2 – unimportant; 3 – neutral; 4 – important; 5 – very important					
Opinions	N	Average value	Modus	Median	Standard deviation
Impact of price of labour on the share of the shadow economy	156	3.85	4	4.00	0.772
Impact of price of labour on dynamic of exit of small enterprises	165	3.49	3	3.00	0.712

Table 4 shows the important impact of labour price on the share of the shadow economy as well as on the dynamics of entry of small enterprises in the wood industry. Therefore, the labour price through the structure of value added per employee has important impact on the shadow economy. Enterprises, which operate in the shadow economy, can avoid a part of operational costs, which can increase their competitiveness as well as can provide a source of income for people, which might do not find employment in the formal sector of the economy. Moreover, the labour price in the structure of value added per employee with taxes and contributions has impact on the taxation burden of enterprises, which operate in the formal sector of the economy. Due to this, they can become less competitive in comparison with the informal sector and its expansion.

Table 5 shows that the impact of the shadow economy on competitiveness of small enterprises in the wood industry is relatively strong with their impact on the reduction of competitiveness of the small enterprises that operate in the formal sector of the economy. Due to less paid taxes the shadow economy enterprises are more competitive vis-à-vis enterprises, which operate in the formal sector, which pays taxes and thus have higher costs of operation. Therefore, the increased share of the shadow economy with its supply of products and services has modest to important impact on the reduction of competitiveness of small enterprises, which operate in the formal sector of the wood industry.

Table 5: Analysis of opinions for impact of the shadow economy on competitiveness of small enterprises in the wood industry in Slovenia, 2009

Interval of opinions for its average value (Likert's scale from 1 to 5)					
Notes on opinions: 1 – very unimportant; 2 – unimportant; 3 – neutral; 4 – important; 5 – very important					
Opinion	N	Average value	Modus	Median	Standard deviation
Impact of the shadow economy on competitiveness of small enterprises	162	3.65	4	4.00	1.112

Analysis of factors of the shadow economy and its share in the wood industry

Reasons for operation in the shadow economy

The reasons to operate in the shadow economy might be different by countries and within a certain countries by individual branches. Table 6 presents the opinions of the respondents on the nine frequently reported reasons as important for decision of an individual to work in the shadow economy in the wood industry. The average value of the respondents' opinions on the important factors for decision to work in the shadow economy in the wood industry in Slovenia vary by questions, but the highest opinion values are found when the higher level of taxes and contributions, followed by opportunities for better earnings and state tax regulations.

Table 6: Analysis of opinions on factors important for decision to operate in the shadow economy in the wood industry in Slovenia, 2009

Interval of opinions for its average value (Likert's scale from 1 to 5)					
Notes on opinions: 1 – very unimportant; 2 – unimportant; 3 – neutral; 4 – important; 5 – very important					
Opinions	N	Average value	Modus	Median	Standard deviation
Rate of value added per employee	162	3.61	4	4.00	0.954
Low value added	159	3.60	4	4.00	0.835
Lack of establishing capital	162	3.30	4	3.00	0.918
Degree of the branch competition	159	3.23	3	3.00	0.885
Level of taxes and contributions	162	3.96	4	4.00	0.905
Tax regulations	159	3.91	4	4.00	0.786
Opportunities for earning	162	3.93	4	4.00	0.962
Law moral of people	159	3.58	4	4.00	1.021
Lack of suitable employment	156	3.06	3	3.00	1.120

Dynamics in the share of the shadow economy in the wood industry

The opinions on the dynamics of the shadow economy in the wood industry are based on the answers by the respondents on the three questions: the share of the shadow economy in the wood industry has declined, has remained at a similar level, and has increased. Table 7 indicates some differences in the average value of the responses on the individual question. The highest average value 4.37 is given to the statement that the share of the shadow economy in the wood industry has increased, while the average value 3.61 is given to the

statement that the share of the shadow economy in the wood industry has remained at a similar level. The frequency distribution and the average value of the opinions suggest that the share of the shadow economy in the wood industry has remained at a similar level or has a slightly increased.

Table 7: Analysis of opinions on the dynamics of the shadow economy in the wood industry in Slovenia, 2009

Interval of opinions for its average value (Likert's scale from 1 to 5)					
Notes on opinions: 1 – very unimportant; 2 – unimportant; 3 – neutral; 4 – important; 5 – very important					
Statements	N	Average value	Modus	Median	Standard deviation
Reduction in the share of the shadow economy	24	3.46	4	4.00	0.721
Stagnation in the share of the shadow economy	84	3.61	3	3.00	0.865
Increase in the share of the shadow economy	57	4.37	4	4.00	0.587

The average share of the shadow economy in the wood industry by the opinion of the respondents is around 22% (Table 8). According to some other estimates the share of the shadow economy in the registered gross domestic product in Slovenia was between 18.9% and 20.8% in 1995, and between 20.4% and 22.5% in 2000 (Nastav and Bojnec 2007). Therefore, the wood industry in Slovenia with the share of the shadow economy, which is close to an average in the economy, is not an exception by the share of the informal sector of the economy.

Table 8: Analysis of opinions on the share of the shadow economy in the wood industry in Slovenia, 2009

Interval of opinions for its average value					
Note on shares: 3%, 6%, 8%, 10%, 12%, 14%, 16%, 18%, 20%, 22%, 24%, 26%, 28%, 30%, >30%					
Opinion	N	Average value	Modus	Median	Standard deviation
The share of the shadow economy	165	21.73	30	22.00	9.936

COMMON FACTORS TO WORK IN THE SHADOW ECONOMY

With the factor analysis we aim to identify whether exist common factors, which explain how changes in the number and size structure of large enterprises in the wood industry in Slovenia causes on the share of the shadow economy. In the sample analysis are included 168 enterprises. The factor model is estimated in two steps: with principal axis factoring and maximum likelihood method with estimation of factor weights with using rotations.

In the factor analysis are used the following indicators: impact of the reduction in the number of large enterprises on the shadow economy, impact of reduction in the size structure of large enterprises on the shadow economy, impact of value added per employee on decision to work in the shadow economy, impact of capital profitability on decision to work in the shadow economy, impact of establishing capital on decision to work in the shadow economy, impact of competition on the share of the shadow economy, impact of

level of taxes and contributions on the share of the shadow economy, impact of tax regulations on the shadow economy, impact of better earning on decision to work in the shadow economy, low moral of people, availability of working places, impact of price of labour on the shadow economy, impact of price of labour on the number of small enterprises in the wood industry, and the impact of the shadow economy on competitiveness of enterprises, which operate in the formal sector.

With the factor analysis we define two common factors, which explain differential in the share of the shadow economy in the wood industry in Slovenia. The variables used are based on the opinions of the average responses. Two common factors explain around 45% of variability in the dynamics of the shadow economy in the wood industry in Slovenia (Table 9).

The first common factor for the role of general enterprise environment factors explains a bit less than 30% of variance for the share of the shadow economy in the wood industry. The greatest impact in the first factor shows variables for the impact of competition in the wood industry, impact of reduction in the size structure of large enterprises, impact of reduction in the number of large enterprises, and impact of value added per employee on the share of the shadow economy in the wood industry. The reduction in the number and size structure of large enterprises in smaller extent causes the dynamics of entry of new small enterprises in the wood industry, but indeed increases already a strong competition as well as causes reduction in the rate of value added per employee. Due to this an important part of labour surplus decides for operation in the shadow economy due to lower operation costs. In a case of restructuring of supply of existing small enterprises towards foreign markets with higher processed products this would be a way to achieve higher value products, which would reduce competition for products and services with lower value added. This would have positive implications on the dynamics of entry of small enterprises and on reduction of the shadow economy in the wood industry.

The second common factor for the role of the state on the shadow economy explains additionally a bit more than 15% of variance for the dynamics of the shadow economy in the wood industry. The greatest impact is on variables the impact of taxation regulations on the shadow economy and to a lesser extent the impact of level of taxes and regulations on the share of the shadow economy and opportunities for greater earnings. Importance of tax regulations implies that the enabling environment should be more institutionally friendly towards small enterprises with more friendly legislation and advice activities, which would reduce the identified negative impacts and create positive synergies to reduce the shadow economy in the wood industry.

Table 9: Share of explained variance of factors of the shadow economy in the wood industry in Slovenia, 2009

Initial Eigenvalues				Extraction Sums of Squared Loadings		
Factor	Total	% of variance	Cumulative in %	Total	% of variance	Cumulative in %
1	4.176	29.826	29.826	3.680	26.282	26.282
2	2.133	15.234	45.060	1.792	12.803	39.086
3	1.444	10.316	55.377			
4	1.194	8.531	63.907			
5	0.947	6.763	70.670			
6	0.860	6.146	76.816			
7	0.773	5.520	82.335			

8	0.650	4.645	86.980			
9	0.604	4.317	91.297			
10	0.484	3.455	94.752			
11	0.284	2.031	96.783			
12	0.203	1.452	98.234			
13	0.140	1.003	99.238			
14	0.107	0.762	100.000			

Estimation method: principal axis factoring and maximum likelihood method.

CONCLUSION

The research has confirmed the importance of the reduction in the number and the size structure of large enterprises on the share of the shadow economy in the wood industry in Slovenia, but less on the dynamics of entries of new enterprises in this branch. This implies that a great proportion of people who lost employment in large enterprises prefer to operate in the shadow economy rather than to establish own enterprise. The reasons for operation in the informal sector are particularly in relatively high taxation burdens and administration barriers. Moreover, labour costs in the structure of value added per employee have important impact on the share of the shadow economy in the wood industry. This branch on average experiences relatively low value added per employee and cannot compete by wages in other branches, which causes outflow of qualified and skilled labour from the wood industry or they decide to work in the shadow economy. This increases the importance of the informal sector of the economy. Incentives for entries of small enterprises and providing easier access to necessary financial means would create incentives for innovation towards products and services with higher value added and opportunities for more competitive relative wages to keep the best qualified and skilled labour in the formal sector as potential for recovery and development of the wood industry.

The research has contributed to science and theory in the area of investigation of the impact of the restructuring of large enterprises on the market dynamics of small enterprises focusing particularly on the shadow economy in the wood industry in Slovenia. Literature so far has focused on more aggregated manufacturing activities in Slovenia. The research contribution is based on own conducted quantitative research analysis using secondary and primary collected survey data. As implications for theory and practice we aim to provide the links between them in order to identify, measure and provide implications and proposals for reduction of the shadow economy and provide incentives for a greater dynamics of micro and small enterprises. The share of the shadow economy in the wood industry in Slovenia has not declined and for its reduction would be valuable to promote taxation and other economic policies, which would not be oriented only on control over the tax collection, but particularly on providing incentives for switch from the informal economy to the formal economy by entry and growth of enterprises in the formal economy. As limitations and future research possibilities are in a fact that our research investigates only the impact of the dynamics in the number of size structure of large enterprises on the shadow economy in the wood industry in Slovenia.

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EMPOWERMENT AND EMPLOYEE MOTIVATION IN BANKING: A MALAYSIA PERSPECTIVE

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Abstract

Empowerment has been highly regarded as an essential strategy for employee motivation in the modern business environment. Though there is presumed linked between empowerment and employee motivation in the literature, limited empirical research has attempted investigation on the relationship between the two. This paper contributes to the gap by offering a systematic investigation on the relationship between empowerment and employee motivation within the context of banking in keeping with the important role of empowerment in a service type of organization. For purpose of comparison, questionnaires were administered to a private bank and a government owned bank in Malaysia. Results indicated differences in relationship between empowerment and employee motivation across the two banks with government owned bank reporting higher correlation compared to the private bank.

Key Words: empowerment, employee motivation, banking, Malaysia

Topic Groups: organizational behavior, managerial and organizational cognition and psychology, human resource management and career development

INTRODUCTION

The complexity of today's business environment has prompted organizations to seek ways to improve their sustainability and competitive strength in the market. Many organizations have transformed their landscape dramatically, which has involved incorporating management strategies that utilize their employees' fullest capabilities and potential. Empowerment is observed to be one of the management strategies that is frequently used by contemporary organizations to create an advantage over their competitors (Ahearne et al., 2005; Campbell, 2009; Chan et al., 2008; Dimitriades, 2005; Menon, 2001; Uner & Turan, 2010).

The essential role of empowerment in contemporary organizations is unsurprising given the appealing benefits it brings to the organizations and their employees. Loughman et al. (2009), for example, highlights that empowerment is vital to the continuous quality

improvement process in organizations. Smith (1994), on the other hand, argues that empowerment has a positive influence on employee attitudinal and behavioral responses in the workplace. In particular, many believe that an increase in employee motivation is one of the positive outcomes of empowerment (Chiang & Jang, 2008; Dee et al., 2002; Drake et al., 2007; Kappelman et al., 1996; Ueno, 2008). Some suggest that empowerment helps to satisfy employees' self-efficacy needs and hence stimulate their intrinsic motivation (Chan et al., 2008; Spreitzer, 1995; Thomas & Velthouse, 1990).

In response to the claims made regarding the positive outcomes of empowerment, many scholars have initiated empirical studies in order to support the claims made. Some of these empirical studies have supported the claims by revealing that positive outcomes, such as increased job satisfaction, improved organizational commitment, better job performance and increased competitiveness, are associated with empowerment (e.g. Dewettinck & Amejide, 2007; Hall, 2008; Nielson & Pedersen, 2003; Spreitzer, 1995). However, it is noted that there appears to be a lack of empirical evidence for certain positive outcomes, such as employee motivation or intrinsic motivation, in particular, although there are presumed links between empowerment and these outcomes. This to some extent warrants further investigation.

Due to the lucrative positive outcomes associated with empowerment, it thus can be expected that empowerment is embraced by many types of business organizations, particularly service organizations. According to Ueno (2008), the empowerment of the employees of service organizations plays a role in enhancing the level of service quality. Empowerment offers the employees of the service organizations the ability to respond promptly to the individual needs of the increasingly demanding customers and unpredictable service situations (Chebat & Kollias, 2000; He et al., 2010; Klidas, 2002). Bowen and Lawler (1992) consider employees' increased job satisfaction, warmer and more enthusiastic interactions with customers and customer retention through word-of-mouth advertisement, the major benefits of employee empowerment for service organizations (Ergeneli et al., 2007). Despite the many investigations into empowerment in service organizations in the literature (Amenumey & Lockwood, 2008; Dee et al., 2002; Hancer & George, 2003; He et al., 2010; Holdsworth & Cartwright, 2003; Siu et al., 2005), it can be observed that only limited investigations have been made into certain types of service organizations, such as those in the banking industry.

This paper basically aims to redress the existing gaps in the current literature, by carrying out a systematic investigation into empowerment in relation to employee motivation, investigating intrinsic motivation in particular, within the setting of the banking industry in Malaysia. Malaysia was selected as the context for the study in the light of the claim made by Bordin et al. (2007) concerning the dearth of investigations into empowerment in a South East Asian context. The paper evolves as follows. It first provides a literature review of the two variables investigated in the study: empowerment and motivation; the interaction between the two is then discussed. Next, a description of the methodology underpinning the study is given, which details the research design, procedures, participants, measures and statistical techniques used in the data analysis. The results of the study are then presented, followed by a discussion. The paper ends with conclusions, in which the contribution of the study to the advancement of business practice is highlighted.

THEORY

Empowerment

The concept of empowerment has spawned diverse definitions. Ergeneli et al. (2007), for instance, highlight that there is no consensus in the literature over defining empowerment. In a similar vein, Holt et al. (2000) point out that definitions of empowerment abound, whilst Mondros and Wilson (1994) and Russ and Millam (1995) argue that empowerment is rarely defined clearly and is used rhetorically (Greasley et al., 2005, p. 355). Although a single universal definition of empowerment is still under debate, two approaches to empowerment are frequently discussed in the literature: structural and psychological.

The structural approach to empowerment has been used by academics and practitioners for longer than the psychological approach. It emanates from the concept of power (Kanter, 1977) and focuses on a set of organizational policies and practices, initiated by management, with the goal of cascading decision-making down through the organizational hierarchy (Ahmad & Oranye, 2010; Biron & Bamberger, 2010). The approach also suggests that employees are empowered when they have access to information, support, resources and opportunities to learn and grow in their work setting (Armstrong & Laschinger, 2006). On the other hand, the psychological approach emphasizes the cognitive state of those employees being empowered, that is, whether or not employees perceive themselves as being empowered (Spreitzer, 1995; Thomas & Velthouse, 1990). This focuses on a psychological state encompassing the employee's perceptions of four cognitions: (1) meaning, (2) competence, (3) self-determination, and (4) impact (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990).

Meaning is described as the value of a work goal or purpose, judged in relation to an individual's own ideals and standards (Spreitzer, 1995). Samad (2007) describes meaning as the state in which employees feel that their work is important and care deeply about what they do, and when they consider the work goals or activities they are engaged in to be congruent with their own value system, ideals and standards (p.256). Competence refers to an individual's belief in his or her capability to perform activities using skills (Spreitzer, 1995). It implies the confidence that individuals feel in their ability to do their work well (Holdsworth & Cartwright, 2003; Steward et al., 2010). Self-determination is concerned with an individual's autonomy in the initiation and continuation of their work behaviors and processes (Conger & Kanungo, 1988). It suggests the freedom that the individual has in deciding how to perform their job. Impact reflects the degree to which the individual can influence strategic, administrative or operating outcomes at work (Spreitzer, 1995). In other words, impact involves the degree to which an individual's work makes a difference to the success of the task and the extent to which an individual believes he or she can influence organizational outcomes (Avolio et al., 2004).

Conger and Kanungo (1988) argue that management practices (i.e. the structural approach to empowerment) are only a set of conditions and that those practices may empower employees but will not necessarily do so. Subscribing to a similar thought, Siegall and Gardner (2000) highlight that the true benefits of empowerment will not be seen unless people first perceive themselves as being empowered. Empowerment is said to have occurred if the individual believes that they have been empowered, therefore, the individual cannot be empowered without the feeling that they have been (Greasley et al., 2008). Stemming from the deficiency of the structural approach in neglecting the individual experience in the empowerment process (Chan et al., 2008), in this study we have chosen the psychological approach to empowerment over the structural approach.

Service organizations are said to involve a unique customer-organization relationship and empowerment is advocated as an essential approach for addressing that unique relationship (Lashley, 1999). It is believed that empowerment enables customer-contact employees to meet and satisfy ever-changing customer requirements and respond promptly to their problems and complaints (Chebat & Kollias, 2000; Klidas, 2002). Empowerment will add value not only to the employees of the service organizations, but most importantly, lead to higher service quality, which in turn results in satisfied and retained customers (Smith, 1994; Ueno, 2008). It is thus unsurprising to note that many service organizations are embracing an empowerment program as part of their strategy for delivering customer satisfaction (He et al., 2010; Hechanova et al., 2006).

Empirical investigations into empowerment in service organizations appear to revolve heavily around certain types of organization. Among them are call centers (e.g. Bartram & Casimir, 2007; Carless, 2004; Holdsworth & Cartwright, 2003), hospitals (e.g. Ahmad & Oranye, 2010; Siu et al., 2005), hotels (e.g. Amenumey & Lockwood, 2008; Chiang & Jang, 2008; Salazar, 2006), education establishments (e.g. Abd. Ghani et al., 2009; Dee et al., 2002) and restaurants (e.g. Hancer & George, 2003; Lashley, 1999). However, investigations into other types of service organizations, such as those in the banking industry, seem to be lacking. Although there are studies that include organizations from the banking industry as part of a more general investigation (e.g. Hechanova et al., 2006; Özaralli, 2003), the number of investigations that focus on the banking industry, in particular, appears to be limited in the academic literature. The service organizations in the banking industry involve a massive amount of customer interaction and hence the limited number of investigations into empowerment in the banking industry signifies a gap that needs to be addressed.

Motivation

There has been unabated interest in employee motivation for many years. The continuing and pronounced interest in the phenomenon of motivation is heavily based on the crucial role that motivation plays in an organization. Lin (2007) identifies motivation as the key determinant of work-related behavior, while Hijazi and Mehbood (2007) highlight the importance of motivation in the workplace due to the clear positive link between employee motivation and efficiency, which in turn leads to improved organizational performance. However, it is said that motivating employees remains a crucial challenge for the contemporary organization (Park & Rainey, 2008).

Motivation refers to those psychological processes that cause the arousal, direction and persistence of voluntary actions that are goal-oriented (Ramlall, 2004). A rather detailed description is provided by Robson (2005), who defines motivation as the willingness to exert high levels of effort towards organizational goals, conditioned by the ability of the effort to satisfy some individual need. There are two broad classes of motivation: (1) extrinsic and (2) intrinsic. Extrinsic motivation focuses on the goal-driven reasons, for example rewards or benefits earned when performing an activity, while intrinsic motivation indicates the pleasure and inherent satisfaction derived from a specific activity (Lin, 2007, p. 137). Aldag & Brief (1979) provide a more simplistic description of the two classes of motivation, in which the former is derived from sources outside the work, whilst the latter is derived from the nature of the work itself. Together, extrinsic and intrinsic motivations influence an individual's intentions regarding an activity and his or her actual behaviors (Lin, 2007).

It is argued that intrinsic motivation plays a more critical role than extrinsic motivation in the workplace. Aldag and Brief (1979), for instance, highlight that an employee experiencing a state of intrinsic motivation tends to be committed to the job and self-fulfilled through it, whereas the extrinsically motivated employee tends to feel a lack of control over their

behavior in performing their job. In addition to working in the absence of close supervision, intrinsically motivated individuals are also capable of controlling their own task accomplishment and resilience to obstacles (Bohnet & Gee, 2002; Thomas & Velthouse, 1990). Within the context of business organizations, intrinsic motivation appears to have a greater influence on guiding behavior towards the mission of the organization (Mallak & Kurstedt, 1996). Following this argument, regarding the greater importance of intrinsic motivation to an organization, we have chosen to study it over extrinsic motivation, for the purpose of this study.

Empowerment and motivation

Empowerment is often regarded as a way to increase employee motivation (e.g. Chiang & Jang, 2008; Dee et al., 2002; Drake et al., 2007; Klagge, 1998; Ueno, 2008). Hopkins (1995) highlights that employee empowerment will increase as the opportunities for development that are offered by empowerment increase. Garg and Rastogi (2006) argue that employees need to be psychologically empowered in order to be motivated to produce a higher level of performance. Moreover, Thomas and Velthouse (1990) posit that psychological empowerment is presumed to be the proximal cause of intrinsic motivation.

Although there is empirical evidence demonstrating the link between empowerment and motivation, intrinsic motivation in particular, there are relatively few studies showing this and they are limited to certain criteria. Zhang and Bartol (2010), for example, investigate empowerment in a non-service organization, revealing a positive significant relationship between empowerment and intrinsic motivation. Hechanova et al. (2006), on the other hand, offer an examination of empowerment within the setting of service organizations, but the emphasis is placed on organizations from a broad range of service sectors, with airlines and hotel companies constituting the majority of the sample. That study reported a positive significant link between empowerment and intrinsic motivation. Gagné et al. (1997) also provide an investigation into a service organization, but the findings reveal only a moderate amount of support for a relationship between empowerment and intrinsic motivation, with only two out of the four dimensions of empowerment (meaningful and self-determination) being shown to have a positive and significant relationship with intrinsic motivation. These studies indicate the need for the current study, for two important reasons. Firstly, there have been few attempts to investigate empowerment in relation to motivation, specifically intrinsic motivation, using the banking industry as the organizational context. Secondly, the varied findings reported on the link between empowerment and intrinsic motivation within service organizations (e.g. Gagné et al., 1997; Hechanova et al., 2006) show that this relationship needs to be further investigated.

The current study therefore seeks to address the aforementioned gaps, that is to further explicate the link between empowerment and motivation, namely intrinsic motivation, within the context of banking organizations. Accordingly, the following hypothesis is formulated:

H1: Empowerment is significantly and positively related to intrinsic motivation.

METHODS

Research design

The study was cross-sectional in nature; a self-administered questionnaire was employed as the data collection instrument and distributed to two local banks in Malaysia, one private and one government-owned. The selection of two banks with different structures is to allow comparison and to provide a wider representative picture of empowerment within banking

organizations in Malaysia. Two versions of the questionnaire were designed, one in English and one in Malay (the national language of Malaysia). The former was administered to the private bank, whilst the latter was used for the government-owned bank, at that bank's request, since Malay is the official language used there. To ensure equivalency of meaning, a back-translation of the translated version of the questionnaire was performed (Brislin, 1980).

Procedures

The questionnaires were administered to the employees based at the head offices of the two participating banks. Each questionnaire was accompanied by a participation information sheet and consent form that explained the aims of the study, that participation in the study was voluntary and confidentiality issues were in adherence with the ethical guidelines applicable to the study undertaken.

For the participant recruitment process, two different approaches to the sampling strategy were applied. Due to the greater accessibility granted to the researcher by the private bank, a simple random sampling strategy was employed. A rather restricted access was imposed by the government-owned bank and thus, instead, a non-random snowball sampling strategy was used for the recruitment process there.

A total of 432 responses were received from the private bank but only 395 were used since, during analysis, unusable responses and extreme outliers were removed from the dataset. On the other hand, 425 responses were received from the government-owned bank, with only 392 retained for the purpose of analysis.

Participants

The majority of the participants in the final sample from the private bank came from two age groups: (1) 26 to 30 years and (2) 31 to 35 years. Each group contained 101 participants, meaning that these two groups combined made up 51% of the final sample from the private bank. For the government-owned bank, the majority of the final sample was from three age groups: (1) 26 to 30 years, (2) 41 to 45 years and (3) 51 to 55 years, each group containing 66 participants (therefore the total of these three groups made up 50% of the final sample from the government-owned bank). In terms of gender, there were more female than male participants in both banks (56% for the private bank and 66% for the government-owned bank). Most of participants from the private bank were in the lower management group (52% of the final sample) and for the government-owned bank, the largest group was the clerical group (43% of the final sample) with lower management being the second largest group (29% of the final sample).

Measurement

Empowerment was measured using a 12-item scale developed by Spreitzer (1995). The scale was composed of four subscales referring to each of the dimensions of empowerment: meaning, competence, self-determination and impact. Each subscale had three items. The items were rated using a seven-point scale, where 1 represented 'strongly disagree' and 7 'strongly agree'. The internal consistency reliability for the entire scale was found to be 0.86 for both the private bank and the government-owned bank. The four subscales were averaged to obtain a single composite measure of empowerment, with a high score indicating a high perceived level of empowerment.

Intrinsic motivation was measured using the Work Preference Inventory (WPI) developed by Amabile et al. (1994). The scale had a total of 15 items with responses on a four-point scale ranging from 1 'never true' to 4 'always true', where a higher score represents a more

intrinsically motivated participant. The internal consistency reliability for the entire scale was 0.78 for the private bank and 0.81 for the government-owned bank.

Analysis

The analysis was carried out using the Statistical Package for the Social Sciences (SPSS) version 16.0 (Pallant, 2007). Prior to the detailed analysis, a preliminary analysis was conducted to check for normality. The results of the preliminary analysis revealed that the distributions of the scores in the study were reasonably normal.

To compare the empowerment scores for the private and government-owned banks, an independent samples t-test was used (Ghauri & Grønhaug, 2005). In addition to the independent samples t-test, an effect size calculation was also employed to further assess the relative magnitude of the differences between the means reported in the two banks (Tabachnick & Fidell, 2007). The same tests were also used to investigate the intrinsic motivation scores for the two banks. Meanwhile, a Pearson correlation was employed to investigate the relationship between empowerment and intrinsic motivation, that is H1 (Pallant, 2007).

FINDINGS

Descriptive statistics and group differences

Table 1 provides the descriptive statistics for the empowerment and intrinsic motivation scores for the two banks. It shows that the private bank has a higher degree of empowerment (M=5.59, SD=0.64) than the government-owned bank (M=5.12, SD=0.77). A similar pattern is found for intrinsic motivation: the private bank was reported to have a higher degree (M=3.18, SD=0.31) than the government-owned bank (M=3.05, SD=0.37).

Table 1: Descriptive statistics for empowerment and intrinsic motivation

Bank	Variable	Mean (M)	Standard deviation (SD)
Private	Empowerment	5.59	0.64
	Intrinsic motivation	3.18	0.31
Government-owned	Empowerment	5.12	0.77
	Intrinsic motivation	3.05	0.37

The analysis of the independent samples t-test on the empowerment scores is depicted in Table 2 and indicates a significant difference in the empowerment scores for the private and government-owned banks; $t(759.412) = 9.445$, $p < 0.001$ (two-tailed). The effect size calculation further revealed that the magnitude of the differences in the means (mean difference = 0.475, 95% CI: 0.377 to 0.574) was moderate (eta squared = 0.10).

Table 2: Independent samples t-test for empowerment

		Levene's test for equality of variances		T-test for equality of means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Empowerment	Equal variances assumed	14.152	0.000	9.452	785	0.000	0.475	0.050	0.377	0.574
	Equal variances not assumed			9.445	759.412	0.000	0.475	0.050	0.377	0.574

A significant difference was also found in the intrinsic motivation scores for the two banks; $t(761.961) = 5.554$, $p < 0.001$ (two-tailed) (see Table 3). A small magnitude (eta squared = 0.04) of differences in the means (mean difference = 0.135, 95% CI: 0.088 to 0.183) was reported through the effect size computation.

Table 3: Independent samples t-test for intrinsic motivation

		Levene's test for equality of variances		T-test for equality of means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Intrinsic motivation	Equal variances assumed	8.207	0.004	5.557	785	0.000	0.135	0.024	0.088	0.183
	Equal variances not assumed			5.554	761.961	0.000	0.135	0.024	0.088	0.183

Hypothesis (H1) testing

Based on the review of the literature, it is hypothesized that empowerment and intrinsic motivation are significantly and positively correlated. As Table 4 demonstrates, a significant positive relationship between empowerment and intrinsic motivation was found in both banks. The results were thus consistent with the hypothesis (H1) proposed in this study. In addition to the full support given to H1, the correlation analysis also revealed an intriguing finding in that there was a higher significant correlation between empowerment and intrinsic motivation for the government bank ($r=0.31$, $p<0.01$) than for the private bank ($r=0.21$, $p<0.01$), despite the descriptive statistics appearing to provide more favorable findings for the private bank than for the government-owned bank.

Table 4: Correlation coefficients for empowerment and intrinsic motivation

Bank	No.	Variable	1	2
Private	1	Empowerment	1.00	0.21*
	2	Intrinsic motivation	0.21*	1.00
Government-owned	1	Empowerment	1.00	0.31*
	2	Intrinsic motivation	0.31*	1.00

* $p \leq 0.01$

DISCUSSION

The findings of the study in general provide further understanding into employee empowerment in organizations. Additionally, the study suggests several specific important points. Firstly, the study shows that there is not much difference between the level of empowerment perceived by employees at the private bank and by those at the government-owned bank, despite the different organizational structures in the two. Spreitzer (1996) explained that an organic structure can lead to ambiguity and uncertainty and empowered employees still need to be reassured by clear goals, tasks and lines of responsibility. Chan et al. (2008) provide empirical support for this, finding no significant relationship between organizational characteristics and empowerment. Secondly, the study further explicates the link between empowerment and intrinsic motivation. The study supports the claims made pertaining to the positive link between empowerment and intrinsic motivation (Chan et al., 2008; Hechanova et al., 2006; Spreitzer, 1995; Thomas & Velthouse, 1990; Zhang & Bartol, 2010). The results also suggest that a higher level of empowerment will induce a higher level of intrinsic motivation in the employees.

Thirdly, the study provides evidence that there is a stronger positive link between empowerment and intrinsic motivation in the government-owned bank than in the private bank. Although these findings seem surprising, they are consistent with the assertion that the organizational structure is not the only factor influencing empowerment (Chan et al., 2008; Spreitzer, 1996). Moreover, it has also been found that empowerment has been a practice in Malaysian government departments for more than a decade; circulars pertaining to the instruction of empowerment have been issued by the Malaysian government to its departments since the 1990s (Abd Ghani, et al., 2009). Finally, the study further advances academic literature through the application of the Western-influenced theory of empowerment into the non-Western setting of Malaysia and through its focus on a different type of service organization, namely in the banking industry.

CONCLUSION AND IMPLICATIONS

This study underscores some essential implications for the advancement of business and practices, in general and within the context of banking in particular. It is imperative to note the crucial role played by empowerment on influencing the level of employee motivation, specifically intrinsic motivation, in an organization. The findings therefore should encourage organizations, particularly managers, to motivate their subordinates by empowering them. Having stated the importance of empowerment, organizations must also continuously find ways to improve their empowerment programs. With increasing challenges in the business environment, existing empowerment programs might no longer be able to address the needs of organizations. In other words, empowerment can be an effective strategy for an organization's success only when reviews of the empowerment program are carried out in line with changes in the business environment.

In conclusion, this study offers further empirical support to the investigation of empowerment within a different type of service organization and a different country setting. The study supports the proposition that there is a link between empowerment and motivation, intrinsic motivation in particular. The study also found that the link between the two was stronger in the government-owned bank than the private bank. Although the proposition of there being no relationship between organizational characteristics and empowerment is supported by previous studies, the evidence for this is limited. Therefore, a further investigation should be attempted to fully explicate this relationship.

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REINDUSTRIALIZATION PROBLEMS OF REGIONS OF ECONOMIES IN TRANSITION - CASE OF VOJVODINA

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Abstract

An industrial policy means regulations in the field of development of, or investment in a particular industry that is practically conducted by governments of all countries in the world, either directly or by indirect measures, under a system of such trade and tax rules that limit the protectionism of any one industry. Modeling of development is generally related to a certain quantitative approach aimed at finding out interdependences between factors and indices of development. In this paper the long range and short range industrial development of Serbia as a transitional country and its regional units, with special consideration of Vojvodina are investigated along with historical conditions and tendencies. Effort is made to give reasonable proposals to attain desired or possible goals of sustainable development and growth in the European environment.

Key Words: Reindustrialization, Regional Development, Serbia, Vojvodina

Topic Groups: Industry, area or region specific studies, Economics and business

INTRODUCTION

There are vast number of countries that face all of the problems of transition, tending to form a stable and sustainable society and economy followed by appropriate open and free market and policies, so that they could become an equal member of group of highly developed countries of the World. Macroeconomic stabilization, inflation control, social and economic reforms, development of institutional and regulation system all are factors that initiate development, which is very specific in every country. One of the means of achieving goals of developing countries obviously is industrialization or in some cases reindustrialization, for there are countries, like Serbia, which over the previous decades suffered from loss of its position in many areas: fall of overall production and consequently its GDP, deteriorating sector structure, rising unemployment connected to evolving of social problems, lag behind in application of contemporary innovations and modernization of industry and especially transportation system, worsening external trade etc. Reindustrialization is an imperative for Serbia and regional units, here belonging Vojvodina as well: manufacturing seems to be the main intensifying factor for overall development in majority of countries. An appropriate industrial policy is needed, meaning regulations in the field of development of, or investment that, is conducted by governments, either directly or by indirect measures, under a well designed system of trade and tax rules.

In this paper the main goal of research is to analyze contemporary situation of manufacturing in Serbia and its regional units, to present general problems, which this country as a transitional economy faces, and by econometric modeling of economic performances for Serbia and its regional unit Vojvodina to find out characteristic interdependences related to well established growth theories, with intentions to give reasonable explanation to the achieved level and proposals for future courses of development.

Transition Countries and Industrial Policy

Transitional economy is a wide term used to cover countries of the world where there are efforts taken to introduce market economy. To this set belong post-colonial and post-dictatorial countries in Asia, Africa and Latin America, and Central- and Eastern European countries as well. There are a huge number of 170 of these countries which comprise around 70% of the World population (EBRD, 2006). Serbia, along with its regional unit Vojvodina, belongs to European transitional countries with specific characteristics and problems.

There are several observations important to transitional countries which aim to achieve consistent and sustainable development (Havrylyshyn, Wolf, 1999):

- macroeconomic stabilization with inflation control,
- realization of all the reforms even when they cause temporary problems, because they can only initiate development,
- there is not a golden rule for transition – every country has its problems and ways to overcome them and
- development of institutional and regulation system are unavoidable.

Relative measures of the transitional process finished are e.g. privatization of small and medium enterprises, government restructuring, price liberalization, reformed trading and currency system, competition politics, banking system reforms, liberalization of the interest rate politics, development of stock markets, development of nonbanking financial institutions and reform of infrastructure.

An industrial policy means regulations in the field of development of, or investment in, a particular industry that, practically, is conducted by governments of all countries in the world, either directly or by indirect measures, under a system of such trade and tax rules that limit the protectionism of any one industry.

Generally speaking, regulations designed to develop economy are related to all sectors, the main are agriculture and industry, while industry is all the time the main intensifying factor for overall development. There are different concepts to formulate industrial politics in particular countries. In the modern world in the majority of highly developed market economy countries the minimalistic policy prevails, that means interventions are only made rarely and in extreme situations, when there are some internal or external reasons for mistaken factor allocation that can lead to negative consequences in economic development. Some of developed and most of transitional countries perform structural industrial policy. This policy presupposes insufficient flexibility and efficacy of the market, so continuous active state interventions are needed in the field of forming appropriate business environment for the industrial sector, developing conditions for industrial firms, defining the structure of industrial sectors by appropriate resource allocation. In transitional countries one of the basic problems is the underdeveloped market structure and mechanism system and intensive influence of non economic factors. Not satisfactory economic system and not developed financial market ask for the formulation of specific industrial policies in transitional countries which will enable forming competitive position under the conditions of open market.

SOME IMPLICATIONS OF GROWTH MODELS

Classical growth models suppose giving intentions to growth through resources, while the output is in the function of labor, capital and land use. From this relation it appears that the rate of growth of output is function of rates of growth of labor, capital, land and overall productivity of production factors. In this theory endogenous variables are population growth dependent on life conditions of the labor force and capital growth, which is in the function of savings. Land use growth is the result either of new land areas or new technology adoption. Technological progress contributes to growth of output through specialization that is intensified by modernization of production means and international trade. Specialization results in output and market growth and that request for further specialization, the final consequence being self-induced growth if connected to economy of scales. As stated, the main resources of growth are savings for investments, but in the same time this could mean decline in living standards for the labor force if savings comprise a greater part of income. Originally the classical growth theory foresees increasing growth rates but in the same time an upper limit of growth exists.

Exogenous growth models (Neoclassical models of Solow and Swan) have a different starting point in modeling long range economic growth in the scope of the neoclassical economy (Solow, 1956 and 1957, Swan, 1956). Labor is a new source of productivity, the marginal contribution of labor and capital are diminishing, there is a constant rate of substitution between factors, and there is a changing rate of technological progress independent of labor and capital; relations of capital to labor and output are not fixed, so there is a possibility to separate capital intensity from technological progress. In short range tax reduction and investment subventions affect the equilibrium state of the output but they do not have a long range effect on growth rate. Accumulation determined by savings and depreciation affects the output growth rate as the economy is tending towards equilibrium state. For economy is always tending towards an equilibrium of the growth rate determined by labor force and technological progress growth rates, the long range growth rate is determined exogenously, outside the model. Greater savings mean greater growth rate, nevertheless

long range growth is more dependent on technological progress than accumulation. In this kind of models technological progress is measured by the total factor productivity, which represents a residual derived on the basis of aggregate factor contributions. Exogenous growth model introduces the law of convergence, which means countries on lower level of development will in long range converge towards developed (measured by GDP per capita, for example).

Despite of this preposition, the reality showed different patterns. After the WW II in the XX century convergences did not happen in general: most of less developed countries were developing at a lower rate than the developed. There were some exceptions, e.g. Japan which at first came close to the developed world and then overcame it; recent years its growth is moderate, showing that convergence remains after achieving convergence. The tendency of convergence between regional units of particular countries led to the formulation of conditional convergence, dependent on institutional conditions, inner free market, quality of external trade and the quality of educational policy. Main disadvantages of the neoclassical theory are neglecting the importance of entrepreneurship and institutional organization as intentional forces of development.

In the contemporary world it comes into view that the modern information technology did not produce expected economic growth, and that is in contrast with the assumption of connection of high productivity with high technology (the Solow paradox). Main reasons for this may be expended lag in effectuating computer use, and then computers are used for ordinary job completing but in a faster manner; traditional productivity is still concerning quantity and not quality and modern information technology mainly effectuates in quality; in service sectors where computers are widely used it is hard to find out the output/input quotient; sometimes increase in output is less than investment to information technology causing diminishing productivity. Besides that in the modern world information technology only comprises 2% of the fixed capital.

As an answer to the neoclassical theory, which supposes exogenously determined growth by savings in the Harrod-Domar models and by technological progress in the Solow model, during the 1980s a new theory was formulated. The endogenous growth model (Romer, 1986) formulates a macroeconomic growth model based on microeconomic foundations: households maximize their utility under income constraints and firms maximize their profit with special attention to human capital (T. Schultz, 1979 and G. Becker, 1992 are winners of the Nobel Prize for formulating and developing the concept of the human capital) and new technologies. Models under these prepositions are formulated either with constant rates of return or through models which encompass knowledge transition and higher quality. Economic policy has a special importance to long range development: investments to research and development and education will enhance rate of growth through introduction of innovations. Openness of the economy enabling competition could lead to continuous innovations and transformations forming a good basis for long range development, while restrictive politics only favors particular industries which produces stagnation or very slow development (Howitt, 2007). Knowledge represents a special source of economic growth – knowledge economy produces high added values with positive effects on externalities and has extra effects which result in development of competitiveness in the global economy. As other theories this one also has some disadvantages like: constant marginal productivity of capital and not satisfactory divergence in development between developed and underdeveloped.

SOME FACTS ABOUT SERBIA AND VOJVODINA

Area of Serbia is 88361 km², of which Autonomous Province of Vojvodina situated in the northern part of Serbia covers around one quarter or 21506 km². The population of Serbia in 2007 is estimated to 7,528,262 and of Vojvodina 2,007,581. In 2007 the total GDP of Serbia was 40,423 million USD or 5,476 USD per capita. In the same year in Vojvodina the GDP is estimated to 13,749 million USD or 6,848 USD pc. The majority of European countries have per capita GDP over the Serbian (Figure 1) that means Serbia has a lot to do about its economic policy and there is a need for a high development rate in every area so that some convergence could be realized. Average rates of growth in some European countries are shown in Figure 2, in the last decade Serbia have performed GDP growth with a relatively higher rate compared to selected European countries, but growth rates of GDP were changing (as in Serbia, so in Vojvodina) and it only achieved higher percentage from 2004, as shown in Figure 3.

Figure 1: GDP in USD per capita for some European countries, 2007

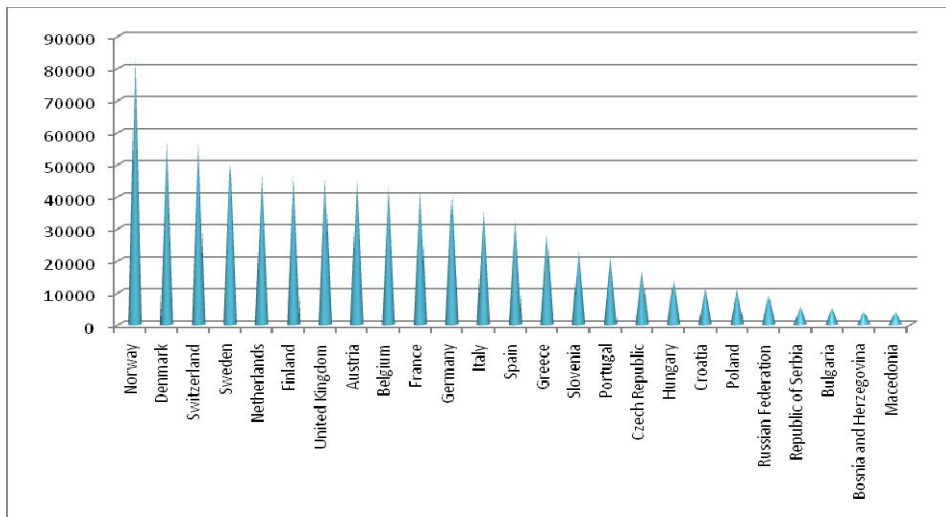


Figure 2: Average GDP growth rates (%) for European countries 1990-2007 (Serbia 2000-2007)

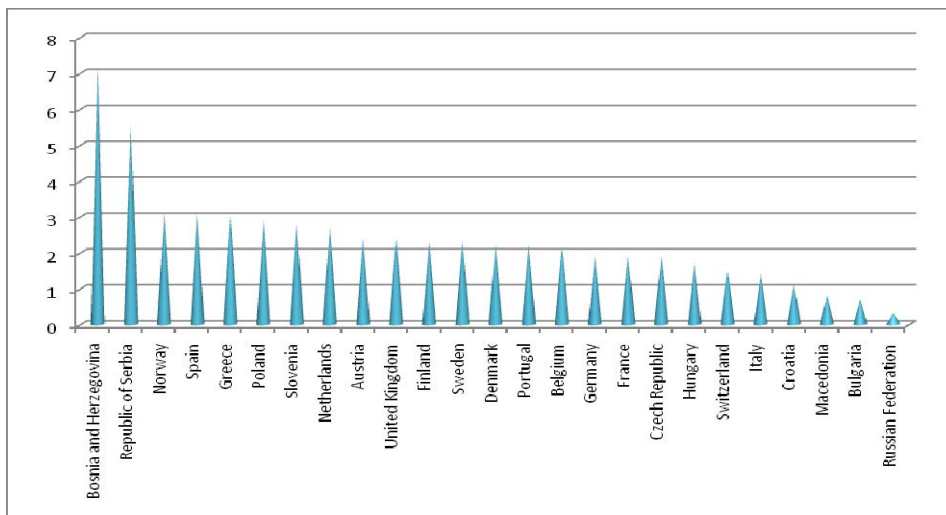
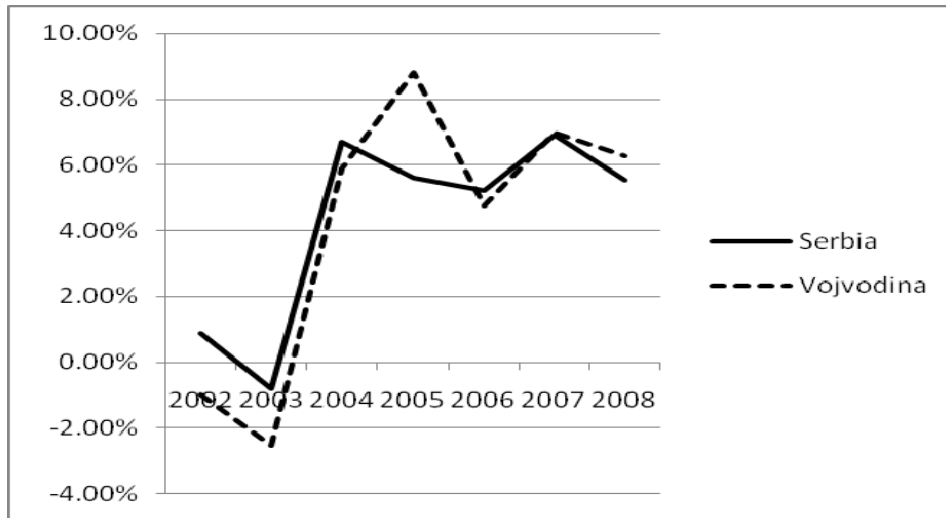


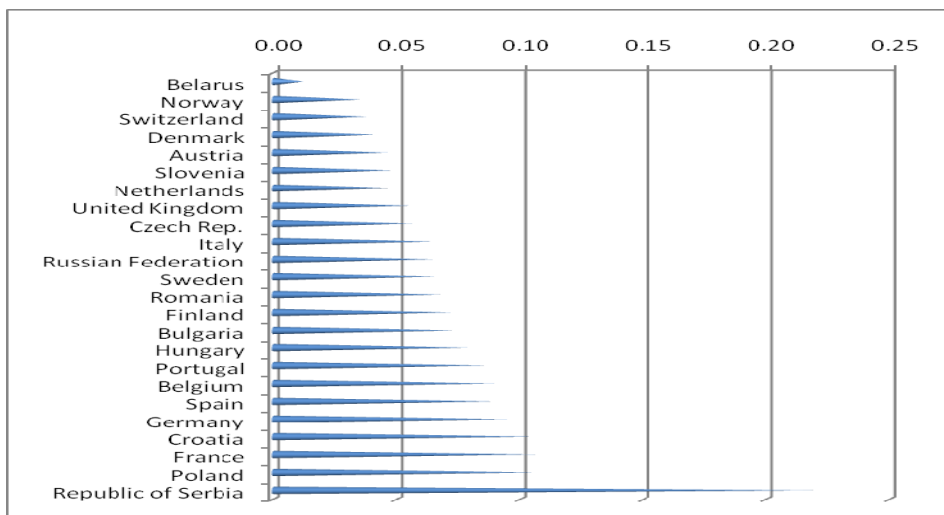
Figure 3: GDP growing rates in Serbia and Vojvodina (2002 constant prices)



Population of Serbia and Vojvodina has not shown significant changes in the last decade, but the number of active populations is decreasing (in the last five years around 5% in Serbia and around 2% in Vojvodina). The number of employed persons is decreasing as well (in the last five years around 2% in Serbia and Vojvodina).

One of great problems in underdeveloped countries represents unemployment derived from a low level of economic activities and that causes further economic, social and political problems, emerging black markets and non official activities. Serbia has the highest proportion of unemployed to employed persons among selected European countries as shown in Figure 4.

Figure 4: Relation of unemployed to employed persons in selected European countries in 2007



MODELING DEVELOPMENT PERFORMANCES OF SERBIA AND VOJVODINA

In our investigations we estimated several models to find out some of stated interdependences proposed by theoretical growth models. Connections between basic aggregate values are estimated on the basis of GDP, land use and productivity (proxied with the index of agricultural production), capital growth (proxy is realized investments) and growth of labor (estimated through positive or negative rate of growth of number of employees). Models are estimated for Serbia (sign S) and Vojvodina (sign V) for the period 2000-2008 in two modifications. First variant concerns basic indices (2001=1) for GDP (Y), employment (L), investment (K) and agricultural production (Z). The second approach is based on chain indices of these variables (sign R is introduced for chain indices).

I. At first, linear models for basic indices of aggregate values were estimated:

$$Y_t = A + b_1 \cdot L_t + b_2 \cdot K_t + b_3 \cdot Z_t + u_t$$

1st model, Serbia

$$YS = 2,2883 - 1,7167 \cdot LS + 0,3794 \cdot KS + 0,0839 \cdot ZS$$

$$t: \quad 1,47 \quad -1,14 \quad 4,17 \quad 0,73$$

$$R^2=94,79\%, DW=1,87, AIC= -3,26$$

2nd model, Vojvodina

$$YV = 0,3305 + 0,0615 \cdot LV + 0,3106 \cdot KV + 0,3387 \cdot ZV$$

$$t: \quad 0,22 \quad 0,04 \quad 4,66 \quad 2,29$$

$$R^2=94,56\%, DW=2,94, AIC=-3,01$$

The results of these models point out the high level of statistical significance of estimated parameters of KS and KV, from which one can conclude the highest importance of effects of investments to the economy output i.e. GDP. Besides that, there is a significant parameter by indices of agricultural production for Vojvodina, as it was expected, for it is a special agricultural region in Serbia. The estimated value of the constant is not significant showing that the aggregate productivity of factors is irrelevant in these models.

Leaving out constant, the next estimated models were obtained:

3rd model, Serbia

$$YS = 0,4993 \cdot LS + 0,4947 \cdot KS + 0,06867 \cdot ZS$$

$$t: \quad 3,29 \quad 9,69 \quad 0,54$$

$$R^2=92,52\%, DW=1,65, AIC= -3,12$$

4th model, Vojvodina

$$YV = 0,3722 \cdot LV + 0,3203 \cdot KV + 0,3532 \cdot ZV$$

$$t: \quad 2,93 \quad 6,93 \quad 2,91$$

$$R^2=94,51\%, DW=2,85, AIC= -3,22$$

By AIC, the constant should be retained in Serbian model, pointing out some implications of technological progress, although with high value of p; in the same time in the Vojvodina model the constant should be eliminated.

In all the four upper models determination coefficients have high values and high F-values, meaning that the factors satisfactory explain the changes of the dependent variable.

II. Second, the log-log models were estimated:

$$Y_t = A \cdot L_t^{b_1} \cdot K_t^{b_2} \cdot Z_t^{b_3} \cdot u_t$$

Prefix L is introduced for natural logarithms of variables. Results obtained are the next:

5th model, Serbia

$$LYS = 0,0341 - 1,3995*LLS + 0,4120*LKS + 0,0938*LZS$$

$$t: \quad 1,35 \quad -1,13 \quad 4,14 \quad 0,84$$

$$R2=94,87\%, DW=1,91, AIC= -3,63$$

6th model, Vojvodina

$$LYV = 0,0384 - 0,09201*LLV + 0,3249*LKV + 0,3449*LZV$$

$$t: \quad 1,05 \quad -1,07 \quad 3,68 \quad 2,16$$

$$R2=93,11\%, DW=2,84, AIC= -3,18$$

These results are similar to those derived from basic indices. Common effects of explanatory variables onto the dependent are high, investments have the highest impact and the influence of agricultural variable is important for Vojvodina. Total productivity is not significant in these models.

With constant eliminated, the results are the next:

7th model, Serbia

$$LYS = -2,5049*LLS + 0,3618*LKS + 0,1842*LZS$$

$$t: \quad -2,51 \quad 3,68 \quad 1,93$$

$$R2=93,00\%, DW=1,94, AIC= -3,54$$

8th model, Vojvodina

$$LYV = -0,9061*LLV + 0,2774*LKV + 0,4159*LZV$$

$$t: \quad -0,86 \quad 3,63 \quad 2,85$$

$$R2=91,59\%, DW=2,89, AIC= -3,20$$

III. Introducing the rate of technological development γ the log-log model becomes:

$$Y_t = A \cdot L_t^{b_1} \cdot K_t^{b_2} \cdot Z_t^{b_3} \cdot e^{\gamma t} \cdot u_t$$

(T is time units):

9th model, Serbia

$$LYS = -0,0215 + 0,7141*LLS + 0,2545*LKS + 0,0396*LZS + 0,0270*T$$

$$t: \quad -0,81 \quad 0,63 \quad 2,90 \quad 0,52 \quad 2,72$$

$$R2=98,20\%, DW=1,60, AIC= -4,45$$

10th model, Vojvodina

$$LYV = -0,0061 + 1,7946*LLV + 0,1829*LKV + 0,1978*LZV + 0,0332*T$$

$$t: \quad -0,18 \quad 1,41 \quad 2,02 \quad 1,47 \quad 2,27$$

$R^2=96,98\%$, $DW=1,91$, $AIC= -3,78$

In these models the effects of investments on development indices are significant, and information criteria show the necessity of including technological progress into the models.

IV. Our next investigation was related to the manufacturing sector of Serbia and Vojvodina, including development of GDP, employment and investments in the manufacturing. Investments were slightly increasing and employment was mainly constant or had a negative rate but GDP was increasing in both cases. Two models have been estimated and both showed significant effects of investments onto the development of the manufacturing sector both in Serbia and its regional unit Vojvodina, as it could be presupposed on the basis of data.

11th model, Serbia

$$YPS = 0,4696 + 0,1493*KPS + 0,3892*LPS$$

$$t: \quad 2,45 \quad 5,55 \quad 1,94$$

$R^2=83,91\%$, $DW=1,75$, $AIC= -4,07$

12th model, Vojvodina

$$YPV = 0,9819 + 0,0416*KPV - 0,0709*LPV$$

$$t: \quad 6,11 \quad 3,35 \quad -0,43$$

$R^2=67,05\%$, $DW=2,32$, $AIC= -3,65$

V. Upgrading upper models with the technological progress, the next results were derived:

13th model, Serbia

$$YPS = 0,5476 + 0,1632*KPS + 0,3066*LPS - 0,00301*T$$

$$t: \quad 1,80 \quad 3,31 \quad 0,95 \quad -0,35$$

$R^2=84,30\%$, $DW=1,94$, $AIC= -3,88$

14th model, Vojvodina

$$YPV = 0,9793 + 0,0447*KPV - 0,0662*LPV - 0,0015*T$$

$$t: \quad 5,55 \quad 1,82 \quad -0,36 \quad -0,15$$

$R^2=67,20\%$, $DW=2,35$, $AIC= -3,43$

It is a disappointing fact that the coefficient of the technological progress is not significant in these models.

VI. By changing to log-log form we obtained the next results:

15th model, Serbia

$$LYPS = 0,1296*LKPS + 0,3189*LLPS + 0,0016*T$$

$$t: \quad 3,73 \quad 0,93 \quad 0,27$$

$R^2=63,98\%$, $DW=2,19$, $AIC= -3,51$

16th model, Vojvodina

$$LYPV = 0,1259 * LKPV - 0,1563 * LLPV - 0,01171 * T$$

$$t: \quad 3,67 \quad \quad -0,80 \quad \quad -3,26$$

$$R^2=63,98\%, DW=2,19, AIC= -3,51$$

This form of the models also implicates importance of investments and but not show any effect of the technological progress.

IMPLICATIONS OF THE ENDOGENOUS GROWTH THEORY – RESEARCH AND EDUCATION

If we observe some prepositions of the endogenous growth theory, statistics on Serbia and Vojvodina seem to be not satisfactory enough. As a proxy for scientific research activity we took income from scientific research work in Serbia and Vojvodina. We compared these figures with GDP (both in constant prices) and found unexpected changes with a tendency of receding. These numbers are shown in Figure 5. Employment in scientific research work also has negative tendencies in Serbia and Vojvodina in recent years. Intensifying of development on the basis of new research and innovations are not realized as expected. In the Figures 6 and 7 the number of employees - scientific researchers in high-school scientific research organizations, in research and development units of enterprises and institutions and in independent scientific research institutions. The education activity is an indicator and factor of development as well. It is very symptomatic that the number of pupils in high schools related to the population is decreasing but the number of students at higher school institutions and on academic level related to the population is increasing in Serbia and in Vojvodina as well in the last ten years.

Figure 5: Income from scientific research work related to GDP in Serbia and Vojvodina 1998-2007

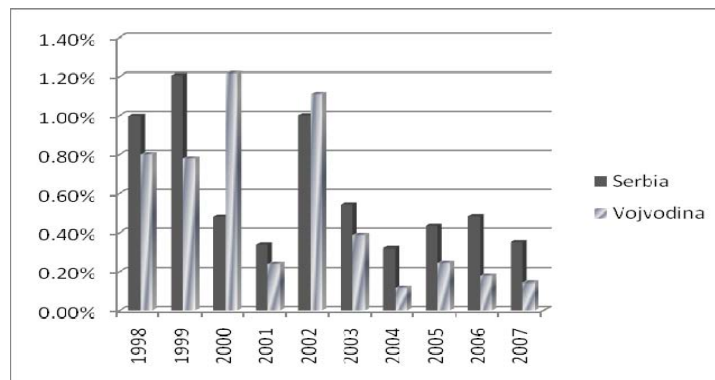


Figure 6: Number of employees - scientific researchers in high-school scientific research organizations, in research and development units of enterprises and institutions and in independent scientific research institutions in Serbia 1998-2007

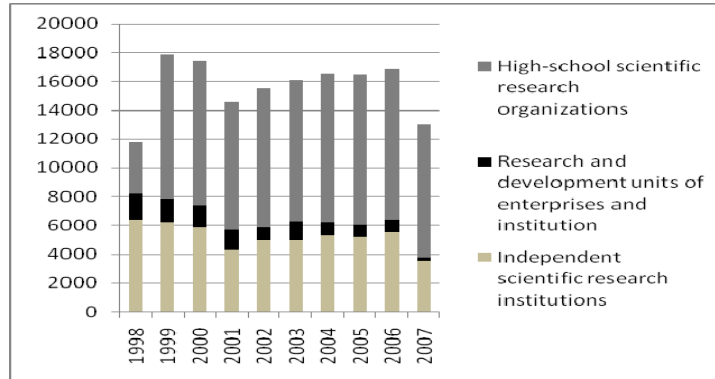
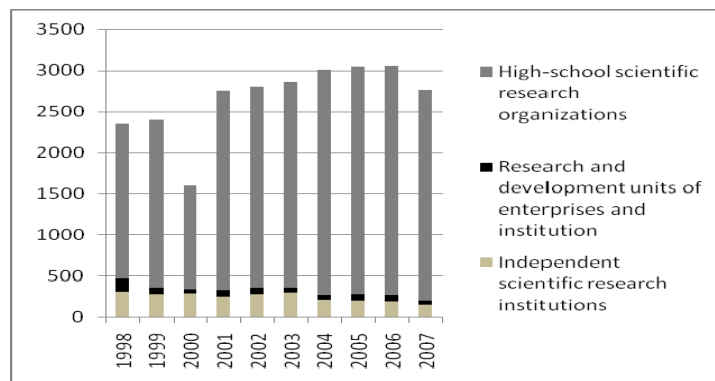


Figure 7: Number of employees - scientific researchers in high-school scientific research organizations, in research and development units of enterprises and institutions and in independent scientific research institutions in Serbia 1998-2007



POSITIONING INDUSTRIAL PRODUCTS OF VOJVODINA IN SERBIA AND TENDENCIES OF MANUFACTURING OF INDUSTRIAL PRODUCTS

Analysing data about product groups or individual products in Serbia and Vojvodina we can find out different structures and different levels of development of particular sectors, different growth or reduction patterns and diverse industrial structure in Vojvodina compared to Serbia. Relative quantities that show the share of Vojvodina's production of particular industrial products in Serbia are relatively stable in some sectors or subsectors, but there are significant share changes with others. The main reasons for these alternations are relative higher growth rates in production either in Vojvodina or other regions of Serbia, retreating production either in Vojvodina or Serbia, and either receding or closing down some productions. There are not well established production quantities that would contribute to overall stability of the region, but indices show upward or downward jumps. This can be found for almost all products, and the negative connotation is especially given by reduction of some production in recent years.

CONCLUSIONS AND IMPLICATIONS

Serbia along with its regional units performed retreating during the last decades. Recently it shows recovery with relatively high rate of GDP growth compared to other European countries, but still nowadays it did not achieve previous results. Reindustrialization is one of the main tasks Serbia should perform to solve other concomitant problems like underemployment which has a lot of economic and societal consequences.

The results of estimated models showed particular relations between inputs and outputs, i.e. resources and results of economic activity, productivity of resources incorporated. Productivity growth could contribute to rising GDP p.c., and it is the way to attain higher wages-lower prices-higher profit and accumulation-sustainable internal development-better position in international trade. No matter which policy Serbia and Vojvodina would lead to rehabilitate its industry - either minimalistic or structural – the increase in product quantities to one unit of production resources is an imperative.

Industry of Vojvodina represents an important part of Serbian manufacture. In the overall manufacturing production of Serbia some products are either predominantly or all produced in Vojvodina (here belonging food products and beverages), but for some products (especially mining and energy production) Vojvodina is totally connected to the Serbian economy. It can be logically concluded that Vojvodina is structurally associated to the Serbian economy as a whole. Vojvodina is a leading producer in sectors of Manufacture of food products and beverages, Manufacturing of tobacco, Cotton fabrics, Carpets and floor coverings, Hosiery, Manufacture of leather, leather products, Plywood, Veneer, Manufacture of coke and refined petroleum products (except lubricants), Colors and pigments, Nitric and complex fertilizers, half of amount of Detergents, Construction products of plastic matters, two thirds of Ceramics tiles and floor boards, half of Plaster, of Manufacture of basic metals cast iron, steel and aluminum only is significant, of Manufacture of metal products wire products are significant, of Manufacture of machinery and equipment Faucets and valves and Bearings, toothed wheels, cogged transmitters and operating mechanisms are significant, Vojvodina predominates in Alternating current motors and Instruments and apparatus for automatic regulation and control manufacturing of Manufacture of furniture Mattresses production is significant in Vojvodina. Manufacturing that is minimal or lacking in Vojvodina are in the sectors of Mining and briquetting of coal, Mining of metal ores, Mining and quarrying of non-metal ores (except sand), Manufacture of wearing apparel and fur, Manufacture of Fiber boards, Manufacture of pulp, paper and paper products, Phosphoric fertilizers, most of Manufacture of rubber and plastic products, Other non-metallic mineral products (except plaster), Manufacture of basic metals (except cast), Manufacture of metal products (except wire), most of Manufacture of machinery and equipment, Manufacture of radio, television and communication equipment, Manufacture of motor vehicles, trailers and semi-trailers, Manufacture of furniture and similar products (except mattresses), Recycling and Electricity, gas and hot water manufacturing and supply. The tendencies found in product quantities of particular manufacturing subsectors show non stability. Some product quantities are growing, others diminishing and most frequently there are unexpected upper and lower jumps pointing out the need for stabilization in production – financing, market conditions and stabilizing of demand, strengthening competitive position of the Serbian manufacturing sector.

The market structure of Serbia along with its unit Vojvodina is not satisfactory developed yet and the functioning of the market mechanism is subject to numerous direct or indirect factors, often comprising non-economic elements as well, the economic system is not well constructed (financial market, money market, property protection etc.) (Savin, 2010). These orientate towards establishing an appropriate ambient and formulating industrial policy that

could overcome the stated problems. In the first Serbian official document on strategy of regional development (Strategija..., 2007) a noticeable stress is put onto intraregional and interregional differences (1:7) that should be resolved by future industrial policy, one of means being forming of clusters, that was realized in 2005 and 2006 for automobile industry, industry of plastic products and rubber, agricultural machinery manufacturing, timber industry, furniture, textile, software production, fruit juices, electronics and mechanical engineering. In the same document the short range development basics is only chosen, here belonging energy, chemistry, textile, leather and footwear. These cannot be bearers of long range development simply because they only are under the level of 10% of European productivity, but presently there is not a way to develop new sectors based on new high technologies. Besides that, the share of investments in GDP is 22% for Serbia, which is under the percentage of other European transition countries. Traditional sectors prevail in the industrial structure of Serbia: the share of high technological intensity in manufacturing is 18%, middle- 46 and low- 36%.

The preposition of the classical growth model starting from capital growth (internal savings and accumulation) should be rejected for Serbia. This country, along with its regional units (Vojvodina) has been closed for several years, but it is opening and should be opened to foreign capital (direct and portfolio investments, bank credits, credits from international financial organizations, donations, common investments).

By the exogenous growth model technological changes are a key factor for development. For the total economy of Serbia and its unit Vojvodina our models have shown the necessity of including the rate of technological development, and according to theoretical prepositions this factor followed by investments is the main element of growth. On the other side, the industrial sector – despite of all expectations that industry is the foremost driving force of the economy – for Serbia and Vojvodina did not have significant technological progress. This finding can be connected also to a preposition of the endogenous growth theory, i.e. founding the knowledge based economy that obtains long-range growth and embraces investments to research and development and education. Our findings for Serbia and Vojvodina were very critical in this sense; the situation could be improved by direct measures.

The main limitations of investigation presented in this paper are connected to data sources. Too short series, lack of the most actual data and lack of information about regional units on lower levels of disaggregation for Serbia and Vojvodina confine the possible range of analyses; also findings about comparative analyses could improve the quality of inferences. These and other problems will be tried to be overcome in a future research in the topic presented in this paper; these are connected to expansion of the time range of investigations, as to find out possible structural breaks in data series for Serbia and Vojvodina and their causes; then, on the basis of supposed convergence, an attempt will be made to project development paths on the basis of parallel analyses of time series of economic and especially industrial performances of EU countries, Serbia with its unit Vojvodina and other (at first European) transitional countries. In all these investigations special attention should be paid to monitor the prepositions of various growth theories and models.

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**THE DISCREPANCY BETWEEN VALUES AND THEIR
ACHIEVEMENT, WORK-FAMILY CONFLICT, AND SATISFACTION
IN DUAL-CAREER COUPLES**

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Abstract

There seems to be a lack of research examining the association of the discrepancy between different types of values and their realization with work-family conflict, work satisfaction, and life satisfaction, which was the aim of this study.

The research was conducted on a sample of 176 employed marital partners (age range= 20-64). 15 different values and their achievement were assessed.

The results show that higher work-to-family conflict was experienced when there was a higher discrepancy between the importance of and actually having enough leisure time, which was one of the most valued and least actualized segments. Interestingly, none of the measured discrepancies were significantly correlated with family-to-work conflict in men, while various were significant for women (e.g. a happy family life). Higher life and job satisfaction was associated with a lower discrepancy between the importance and realization of certain work values, while this was not the case for men.

Key words: value importance, value realization, work-family conflict, satisfaction

Topic Groups: Managerial and organizational cognition and psychology, Gender, diversity and social issues

INTRODUCTION

Previous research has shown that people who give high importance to both work and family domains have been shown to experience the highest levels of work-to-family and family-to-work conflict. Moreover, work-family conflict has been associated with lower satisfaction with family and work life and life in general. Assuming that a high discrepancy between a person's values and the realization of these values can be devastating to life satisfaction, it seems interesting to examine the association of the discrepancy between different types of values and their realization with work-family conflict, work satisfaction, and life satisfaction on a sample of employed men and women.

THEORY

There are numerous variations of the definition of values. Some emphasize that values are the standards based on which we evaluate ourselves and our environment (Šverko, Babarović, and Šverko, 2007). Roe and Ester (1999) define values as latent constructs that relate to the ways in which people evaluate activities and their outcomes. Other definitions emphasize that values guide the behavior of individuals. Šverko and Vizek-Vidović (1995) state that values are specific criteria of priorities that direct human behavior. Most authors believe that values are a manifestation of one's needs. Such a view is advocated by Super (1995), who clearly distinguishes values, interests, and needs, establishing a hierarchical relationship between them. According to his theory both values and interests arise from needs. Values are the goals with which we try to satisfy our needs, while interests are specific activities by which we achieve our goals or values. Thus, it can be said that career satisfaction is largely a matter of an individual comparing his / her career and life expectations with those being offered (Rose et al., 2006). This points out the need of taking the discrepancy between the importance of certain goals and their achievement into account when measuring human satisfaction with different aspects of life or different life roles.

Indeed, people hold various roles in their life, such as, for example, the role of a student, worker, parent, or citizen. Each of these roles include a line of expected behaviors. When formalized, these expected behaviors become norms. Roles can be defined as the sum of behaviors, rights, and obligations that one has to display in a given social situation (Šverko, Babarović, and Šverko, 2007). Individuals generally tend to fulfil expectations and satisfy norms, and therefore play roles. In some stages of life individuals play multiple roles at once, but all these roles are not equally important to them. Usually two or three roles are the most prominent (salient), while others are peripheral. Salient roles represent the essence of a person; they are the basis of personal identity and are essential for life satisfaction (Super, Savickas, and Super, 1996). When they are held simultaneously, different roles interact and affect each other. Roles can support or complement each other, but can also be in mutual conflict and become a source of stress when the role demands are not compatible, or when they exceed the capabilities of an individual. Since two important focal points of adult life are family and work, most research has dealt with the interaction of these two domains. For example, research showed that a happy family life correlates with high levels of job satisfaction and objective career success (Shaffer, 1987; Rose et al. 2006). In cases when the role expectations of these two domains were not compatible, most research has shown that two separate types of conflict can arise (Frone, Russell, and Cooper, 1992): conflict due to the disrupting interference of work to family life (work-to-family conflict) and conflict due

to the disrupting interference of family to work life (family-to-work conflict). These conflicts are related to outcomes such as job dissatisfaction, job burnout, and turnover, as well as to outcomes related to psychological distress, eg. depression and life and marital dissatisfaction (Frone, Yardley, and Markel, 1997; Hill, 2005; Kinnunen and Mauno, 1998).

The importance one gives to various life roles may have implications on the perceived level of work-family conflict. However, there is an insufficient number of research on values or the relative importance of gender roles and their relationships with work-family conflict. Most of these studies showed that the importance of family, measured as the degree of emotional preoccupation with family life, is positively correlated with work-to-family conflict, while the emotional preoccupation with work is positively correlated with family-to-work conflict (eg, Carlson and Kacmar, 2000, Fox and Dwyer, 1999). In other words, the distracting effects of activities such as family and home responsibilities are more pronounced the greater the importance of work is, and the distracting effects of activities that are associated with work commitments are more pronounced the more important the family is. In a research in Croatia, Šverko, Arambašić, and Galešić (2002) found that greater importance of work was associated to a higher perception of work-to-family conflict and lower perception of family-to-work conflict, while a greater importance of family life was only associated to less experienced levels of work-to-family conflict. They also found an average high importance of both family and work, while the levels of work-to-family and family-to-work conflict were relatively low.

Prior research has found that being married leads individuals to give their personal lives priority over their work lives. Similarly, being a parent increases the importance that individuals place on their family role (Rose et al., 2006, Stroh, Brett, and Reilly, 1996). When taking into account different age groups, Super (1980) states that the number of roles and their requirements change during different periods of life and that the importance of each role rises and falls in accordance with these differing developmental tasks. However, as individuals advance in age to the maturity stage of their career, they have been found to place a greater emphasis on a balance between their work and family lives that individuals place on their family roles as they age. The career satisfaction of older individuals is likely to be more negatively affected by work-family conflict than that of younger individuals (Rose et al., 2006). Cinamon and Rich (2002) found that both demographic gender and gender-role values were important to the experience of the work-family interface. Their results indicated that more men than women placed greater value on work than family and more women than men placed greater value on family than work. There were no significant differences for those in the dual category who saw work and family as being equally important. Moreover, women had a higher level and frequency of work-to-family conflict and ascribed more importance to family-to-work conflict than men.

Schwartz (1996) defines values as desirable goals that serve as guiding principles of people's lives. People want to achieve values, as relatively permanent goals, through various life roles. Due to the expectations of fulfilling their own individual values through a variety of roles and the interactions of various life roles, values can influence an individual's professional and family-related decisions. In this sense, values could at least partially determine the interference of work and family (parental, spousal, etc.) roles, while the salience (prominence) of a life role could determine the direction of work-family conflict.

According to all the previously mentioned issues and the results of previous research, the aim of this study was to examine the association of the discrepancy between different types of values and their achievement with work-family conflict, striving for achievement, work satisfaction, and life satisfaction, taking also into account gender, age, and qualification level (educational status).

Hypothesis 1: It can be expected that the two types of work-family conflicts will be increased with the increase of the discrepancy between the estimates of importance and of achievement of individual values.

Hypothesis 2: Due to the salience of roles in the domestic domain, it can be expected that this discrepancy in some, especially in work values, is higher in women than in men. These discrepancies could largely determine the conflicts between work and family roles, job satisfaction, and life satisfaction among women.

METHODS

Participants

The research was conducted on a sample of 176 employed married couples who were between the ages 20 and 64 and had at least one child living with them. The sample was chosen according to the women participants with the criteria that they were at least high-school graduates. Since the educational status of their partners was not controlled for, the average educational status of the sample of women in this study was higher than the average educational status of the male participants. Also, which could have been expected, the average age of the sample of men in this study was higher than the age of their female partners. This study employed the survey method.

Instruments

A set of questions of socio-demographic type where the respondents were asked to answer questions on sex, age, workplace (the type of work), educational status, and years of experience at the present workplace.

The Values-Achievement Scale constructed for the purpose of this study. It contains 15 items referring to specific life goals. Some examples of these items are: 'Being successful in my career', 'Having a happy family life', and 'Being a role-model for others'. The respondents were asked to assess the importance of each of these goals and their achievement on two 5-point scales (1-not important at all/not achieved at all; 5-very important/very high level of achievement).

The Work-Family Conflict Scale developed by Netemeyer, Boles, and McMurrian (1996) which has been applied in some previous studies in Croatia (eg., Šimunić, 2008). It is composed of 11 items, i.e. two sets of items that differ in the direction of conflict. Therefore, 6 items measure the disruptive impact of work on family life (work-to-family conflict) and 5 items measure a disruptive influence of family on work life (family-to-work conflict), taking into account time demands and fatigue as a cause of conflict. The original scale has 12 items, but one item was excluded from the family-to-work subscale as a result of the exploratory factor analysis we conducted. The reliability of the work-to-family conflict subscale expressed by the coefficient of internal consistency was about 0.81, and of the family-to-work subscale around 0.76. The respondents were asked to express their agreement / disagreement with each item on a 7-point scale (1-strongly disagree; 7-strongly agree).

Scales of job, family, and life satisfaction were three scales on which respondents had to assess the degree of their overall satisfaction with their job, family, and life in general on a 7-point scale (1-very dissatisfied; 7-very satisfied).

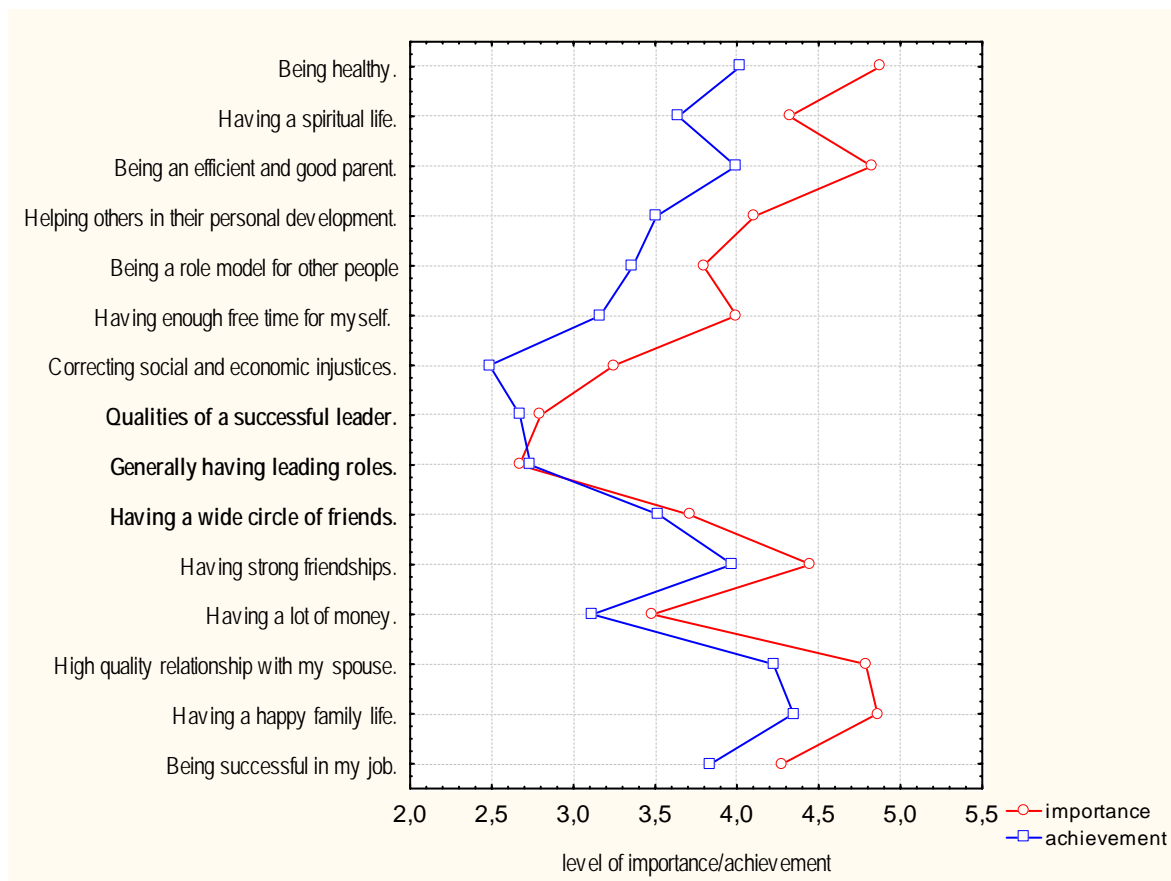
The striving for achievement was measured by a scale developed by O'Neil and his colleagues (1986; Success, Power, Competition). It contains 13 items with a 6-point

response scale (1-'strongly disagree'; 6-'strongly agree'). The content of the items includes the care for personal achievement, career development, orientation towards maintaining authority, domination and influence over others, and competing with others in order to get something or comparing oneself with others to establish superiority in a particular situation. A one-factor structure and satisfactory reliability were obtained (reliability coefficients from 0.86 to 0.89).

FINDINGS

In accordance with the main objective of this research, i.e. the examination of potential associations related to the evaluations of various life values, their achievements and possible repercussions on work-to-family conflict (WFC), family-to-work conflict (FWC), work satisfaction (WS), and life satisfaction (LS), the initial analysis included descriptive statistics of the items of The Values-Achievement Scale. Figure 1 shows the average estimates of the importance and the degree of achievement of the fifteen examined life values for all subjects included in this study.

Figure 1: A graphic profile of the arithmetic means of estimations of the importance and achievement of the examined life values



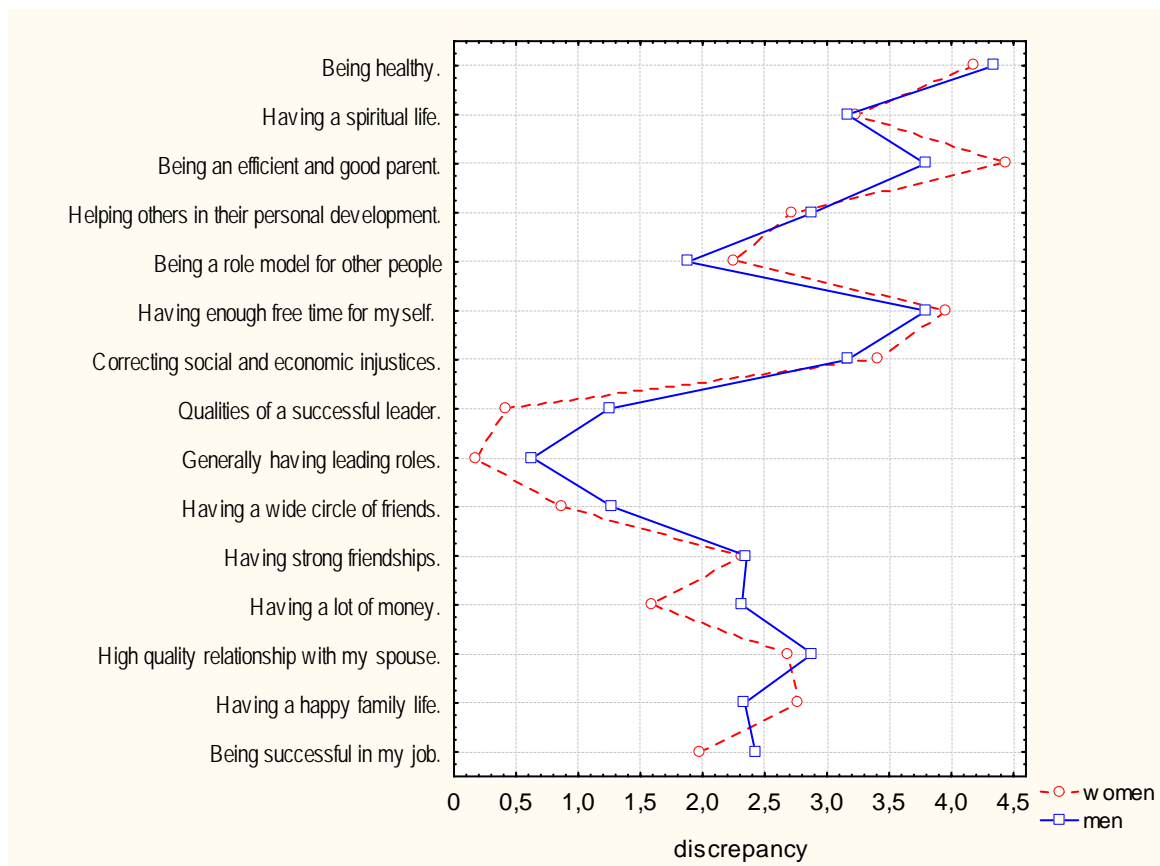
As can be seen from the results, the achievement of the measured values is significantly lower than their importance, except for three values (developing the qualities of a successful leader, having leading roles, and having a wide circle of friends) which also had a relatively low importance for the respondents. The most important and also the most achieved values are those related to health, parenting, marital and family relations, and strong friendships.

Assuming that the strength of motivation for the realization of certain values depends on their importance for the individual and the likelihood of their achievement, so-called discrepancies were calculated as a measure of this motivation strength. To compute the level of discrepancy between the importance and the achievement of different values, the distinction between the level of importance and the level of achievement was multiplied by the importance for each value and respondent. Thus, the lowest result reflected lowest discrepancy and lowest importance, while the highest reflected highest discrepancy and highest importance of the value (Formula 1). The profile of the obtained discrepancies for each value of employed spouses is presented in Figure 2.

Formula 1: $D_v = (I_v - A_v)I_v$

D_v – discrepancy of each value (v)
 I_v – importance
 A_v -achievement

Figure 2: A graphic profile of the discrepancies between the importance and achievement of the measured values



The results show that the greatest discrepancies are associated with health, parenting, and the amount of free time, and the lowest with the qualities of a successful leader, the need for leading roles, and a wide circle of friends. Furthermore, the largest differences in the discrepancy levels between spouses were obtained for the values of successful leadership and financial status.

In further analysis, the factor structure of the obtained discrepancies of all the tested values was verified. Exploratory Factor Analyses with a varimax rotation was conducted. The scree plot and the eigenvalue greater than 1.0 criterion suggested two factors. The factors accounted for 32% of the variance of the items. Scales were created as the means of items that had factor loadings greater than .30 for these two factors (Table 1). Two items (3 and 5) that had factor loadings greater than .30 on both factors were included in the computation of both factor scales.

Table 1: Factor analysis of the measured values' discrepancies

item	Factor loading		h2
	Factor one	Factor two	
Being successful in my job.	0,320	0,296	0,190
Having a happy family life.	0,446	0,289	0,282
Having a high quality relationship with my spouse.	0,328	0,335	0,219
Having a lot of money.	0,198	0,618	0,422
Having strong friendships.	0,376	0,392	0,295
Having a wide circle of friends.	0,176	0,503	0,284
Generally having leading roles.	0,036	0,773	0,599
Developing the qualities of a successful leader.	0,093	0,725	0,534
Participating in correcting social and economic injustices.	0,488	-0,025	0,238
Having enough free time for myself.	0,493	0,171	0,273
Being a role model for other people	0,473	0,245	0,284
Helping others in their personal development.	0,574	0,181	0,362
Being an efficient and good parent.	0,450	0,090	0,210
Having a spiritual life.	0,623	0,109	0,400
Being healthy.	0,474	0,158	0,250
Expl.Var	2,480	2,363	
Prp.Totl	0,165	0,158	

Note. Bolded factor loadings indicate the items used in scale construction.

The first factor, General life value (GLV), is consisted of 11 items reflecting important life values such as success in, for example, work role, marital role, parental role and generally more important values. The internal consistency of the 11 items was satisfactory (Cronbach α coefficient = .78). Corrected item–total correlations were all greater than .30, with a mean corrected item–total correlation of .25. The second factor is consisted of 6 items measuring values related to social status and prestige (SSP) and those values were assessed as less important. The coefficient of the internal consistency of the 6 items was .74 with a mean corrected item–total correlation of .35.

In further analysis, one-way analyses of covariance were conducted to examine differences in the level of the measured variables according to the participants' gender (Table 2). As the sample included employed married couples, it was not possible to equalize the sample by age and qualification level. Namely, the female marital partners were significantly younger and had on average a significantly higher qualification level than their spouses, so these two variables were treated as covariates.

Table 2: The results of analysis of covariance of the examined variables according to the spouses' gender (covariates: age and qualification level)

		ANOVA					ANCOVA		
		Mean	sd	df	F	p	df	F	p
GLV	male	33,03	24,37	1/352	0,127	0,722	1/349	0,183	0,669
	female	33,95	24,32						
SSP	male	10,71	14,99	1/352	3,447	0,064	1/349	1,624	0,203
	female	8,07	11,52						
WFC	male	3,58	1,40	1/352	0,133	0,715	1/349	0,001	0,977
	female	3,52	1,28						
FWC	male	1,97	0,99	1/352	1,328	0,250	1/349	1,420	0,234
	female	2,09	1,10						
LS	male	5,58	1,00	1/352	0,154	0,695	1/349	0,001	0,971
	female	5,63	1,04						
JS	male	5,08	1,24	1/352	2,111	0,147	1/349	1,057	0,305
	female	4,88	1,28						
SFA	male	31,13	8,74	1/352	10,546	0,001	1/349	13,922	0,000
	female	28,30	7,64						

Note: GLV= General Life Values; SSP=Social Status and Prestige; WFC=Work-Family Conflict; FWC=Family-Work Conflict; LS=Life Satisfaction; JS= Job Satisfaction; SFA=Striving for Achievement

As can be seen, spouses differ only in their striving for achievement, i.e., men showed significantly higher levels of striving for achievement than their (female) spouses.

Furthermore, in Table 3. the correlations between the examined potentially relevant variables are shown, separately for the two samples of men and women (spouses).

Table 3: Correlations between the tested variables for the sample of men and women

Variables	GLV	SSP	WFC	FWC	LS	JS	SFA
GLV		0,58**	0,20**	0,01	-0,06	-0,12	0,22**
SSP	0,60**		0,09	-0,01	-0,14	-0,14	0,38**
WFC	0,25**	0,20**		0,35**	-0,07	-0,09	0,19*
FWC	0,23**	0,19*	0,26**		-0,13	-0,06	0,26**
LS	-0,20**	-0,09	-0,04	-0,12		0,47**	-0,14
JS	-0,15*	-0,12	-0,05	-0,10	0,51**		-0,06
SFA	0,07	0,16*	0,05	0,29**	0,10	0,14	

Note: Correlation coefficients above the diagonal (bolded) - Only male sample (N=172)

Correlation coefficients below diagonal - Only female sample (N=172)

* p <05; ** p <01

The results showed a significant association between GLV and the SSP, which might be expected, since both factors are part of the general value system. Also, WFC and FWC were significantly positively correlated in both samples, which is generally consistent with previous results by other authors (Frone et al., 1992; 1997), but in contrary to the results of a previous research in Croatia on medical nurses (Šimunić, 2008) where there was no significant correlation between these two types of conflict. Job satisfaction and life

satisfaction were positively correlated in both samples, which implies the so-called spillover hypothesis.

Furthermore, in the male sample all the measured variables related to the system of values and work-family conflict are positively correlated with striving for achievement. On the other hand, in the sample of women, work-family conflict variables are generally positively correlated with general life values, but also with LS and JS. Only FWC is associated with striving for achievement.

DISCUSSION

Descriptive analysis of the assessments of importance and achievement of the examined life values showed a generally lower level of achievement in comparison to the estimated importance for the majority of the items. However, it is interesting to note the similarity between the profiles of importance and achievement (of mean estimates; $r = 0,94$). This implies that values can also be treated as goals; respectively, the more important the goal is the more the individual invests in achieving it. However, it is possible that some of the common variance of estimates of the importance and achievement of life values can be attributed to so-called self-deception. Self-deception does not imply a deliberate distortion of responses, but implies a testimony of the respondents' own beliefs (Paulhus 1984), and since these are significant lifetime values (parenting, health, harmony in marital relationships, etc.), it is possible that the achievement of certain life values is unintentionally overestimated. This idea could be supported by the extremely low estimates of the importance of values such as the qualities of successful leaders, having a leading role, and having a wide circle of friends, where there were also no significant differences in the assessment of importance and achievement. These items are also saturated with the second discrepancy factor (SSP), and apparently are partially independent dimensions of the examined set of values and are primarily based on utilitarian value orientations.

The computed discrepancies take into account both the importance and achievement of individual values and the profiles of discrepancies are very similar for both spouses ($r = 0.96$). These results were to be expected, primarily because the spouses (respondents) mainly originate from the same social, religious, and cultural background, which indirectly implies a similar value system and a permanent harmonization of values during common life. For both spouses, the most important and simultaneously most accomplished values are those related to health, parenting, marriage and family relations, and strong friendships. At the same time, these values were shown to have the largest discrepancy, along with not having enough free time for oneself.

Regardless of the similarities of spouses and the absence of differences regarding the importance and achievement of certain values, there are significant differences among them in the level of striving for achievement and the correlates of WFC, FWC, JS, and LS. The results of this research showed that the spouses primarily differ in the level of striving for achievement. Besides being significantly higher (which is also shown in the ANCOVA), it is also the major correlate of WFC, FWC, and the examined life values (in terms of the discrepancy) for men. On the other hand, for women general life values are positively associated with the experience of WFC and FWC, but negatively associated with job and life satisfaction. Specifically, among men who have a higher striving for achievement there is a higher level of FWC and WFC, which indicates that generally high expectations from oneself may result in a greater experience of these conflicts. Another reason for this could also be found in the socio-cultural milieu in which men are still perceived as the head of the family and the dominant breadwinners. On the other hand, women's dominant values are regarding

family and marriage, and the discrepancy of these values are an evident correlate of the experience of both conflicts, which results in reduced job and general life satisfaction. For both spouses there was no correlation between the experience of WFC and FWC, and JS and LF. However, although there is a significant positive correlation between JS and LF for both spouses, the difference is that, for women, satisfaction is linked to the value discrepancies. For example, the results show that higher work-to-family conflict was experienced when there was a higher discrepancy between the importance of and actually having enough leisure time, which was one of the most valued and least actualized segments. In fact, it seems that the existence of value discrepancy has a significant impact on the experience of WFC, FWC, JS, and LS in women, although these variables share a very small and insignificant part of the common variance. Perhaps the reason lies in the fact that satisfaction with life and work are very complex and multidimensional constructs, while this study covered only a small number of potentially significant correlates.

A possible drawback of this research is related to the size and the method of selection of subjects. Namely, the sample was formed according to the women, and thus there were differences between men and women in some relevant variables. Specifically, the level of education for women in this sample were on average higher than for the men. This reduces the possibility of generalizing these results to all employed married couples. It is recommended that future research make spouses equivalent by as many relevant variables as possible (education level, economic status, etc.). The limitations of the cultural milieu should also be taken into consideration.

CONCLUSIONS

The results showed that spouses generally have a very similar system of life values as well as the achievement of the same values. Also, when it comes to the conflicts of work and family roles for men, they are primarily associated with the level of their striving for achievement, while for women they are primarily associated with their basic life values, or the discrepancy between the importance and achievement of these values. Generally, for women, the most significant correlate of WFC and FWC is the realization of values related to family, marriage, and enough free time, while for men it is the expectation about their own achievements at work, as well as in the family. These results likely imply differences in development and socialization processes (gender roles) between men and women. They did not have larger discrepancies nor a larger level of work-family conflict than men, which diverges from the established beliefs of the society. This was so even when the women had higher educational status and work status positions. It is possible that the respondents did not perceive greater discrepancy due to realistic expectations. The women in this sample still put family and general life values ahead of business accomplishments. The reason may be the acceptance of the norms included in different roles (work, parental, marital, etc.), which are still traditional in our society. Unlike most previous research in this area, whose primary interest was focused on the quantity and intensity of different work and family stressors in the experience of conflict between work and family roles, this study proved an extremely important role of the perceptions of achievement of some important work and life values, or goals.

IMPLICATIONS

The correlates of WFC and FWC in men and women are evidently different, which implies the need for different approaches both in research and in practice. Also, it seems that some individual, relatively stable characteristics (the system of values, attitudes, personality traits)

may contribute to a better explanation of conflicts between work and family roles than more often examined situational variables such as job or family characteristics, the more so as the perception of the levels of WFC and FWC are primarily introspective variables experienced on a subjective, not objective level. This suggests that future research should place emphasis precisely on the aforementioned variables and, if possible, should include a much broader system of general and work values.

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EXPLORE SMALLER AND MEDIUM FIRMS TO ABSORB NEW KNOWLEDGE AND MANAGING FOR ADOPTION OF INNOVATION AND GROWTH

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Abstract

Purpose – The purpose of this article is to explore SME capacity to absorb and manage knowledge as a prior condition to the successful adoption of innovations and entrepreneurial growth. **Design/methodology/approach** – Drawing on the findings from more than 1,500 SME owners across regular quarterly SER Team surveys and from other large scale studies, this article examines the effects of experiential and formal knowledge on the development of SME absorptive capacity. **Findings** – There were significant age, educational and size effects that influence SME acquisition and assimilation of knowledge. Primarily, it is the small firms of 15 p employees that have the capacity to absorb and use new knowledge – especially those with higher educational levels and clear growth objectives. These firms are not startups but they do tend to be younger firms with younger founders. **Practical implications** – Given the main policy aim is the development of clusters and of knowledge-based firms, policy makers should focus on SMEs recently started by graduates or people with technical qualifications; educators need to develop technology and innovation management programmers for these firms. **Originality/value** – This article makes an important contribution to the identification of priorities for public SME development support

and areas where business schools and enterprise trainers could maximize their economic and developmental impact.

Keywords: Innovation, Entrepreneurialism, Knowledge management, Small enterprises

INTRODUCTION

Public policy interest in Iran's four million or so small and medium enterprises

(SMEs) springs from three perceived SME strengths:

- (1) Their role in promoting flexibility and innovation;
- (2) Their labor market function in creating jobs and absorbing unemployment; and
- (3) The huge size of the sector (99 per cent of Iran firms and just under 50 per cent of jobs).

This article is concerned mainly with the first of these functions ascribed to the SME sector, the expected role of entrepreneurial SMEs as the key source of competitive innovations. An expectation that reflects Schumpeter's (1934; 1942) continuing influence. To survive in the new competitive environment, no enterprise can afford to stand still. All have to be open to new ideas, new ways of working, new tools and equipment, and be able to absorb and benefit from them. A policy to enhance innovation must be present in a modern enterprise policy as one of its main components. This means buttressing enterprise policy by measures specifically directed at encouraging the emergence and growth of "first mover" firms, and the flow of innovation from them into the enterprise sector as a whole (page 5).

In Iran However, more than three decades of research since the SMEs strategy document report in 2001 indicate clearly that these expected benefits from the sector derive mainly from the activities of a relatively small proportion of entrepreneurial SMEs. The majority of SMEs, some 70 per cent, do not employ other people (Small Business Service, 2004) and, of those that do, only an active entrepreneurial minority have a strong propensity for growth, research and development (R&D) or innovation (Talebi, Hamidi, 2003). It is the development of these small entrepreneurial firms, with their capacity to make effective use of technology transfer, R&D, networking, and knowledge sharing and creation, that are the real focus of policy makers and of this article. The key issues, which are outlined through a consideration of relevant research and publications on the knowledge needs of SME owners plus a review of recent literature on the absorptive capacity of firms, are explored through the findings of regular, quarterly surveys of small firms in Britain. These surveys enable the effects of age, levels of education and growth-motivation on SME owners to be examined in relation to the adoption and generation of innovations in small UK firms.

BACKGROUND

Much that is written about global competition and knowledge management tends to reflect the experience of large national firms and multinational corporations. The main impact on SME tends to be mediated through effects on local economies, and on larger organizations. It is not a level playing field and successful entrepreneurs need to be very efficient in maintaining their competitive knowledge base. As well as facing tougher resource and time constraints, SMEs also face tougher competition for necessary competences and skills in local labor markets due partly to a poor supply of such skills and partly to intensified competition from larger firms. In its 2002 report on work-based learning in SMEs, Iran's Vocational Skills Development Agency (Talebi et al., 2002), which identified a number of critical skills shortages among different sectors of SMEs, summarized the policy challenges as:

In a fast-changing world of work, the ability to adapt and develop new learning and skills is a crucial ingredient in a successful economy. Globalization and the knowledge-driven economy require the Iran to develop a more highly-skilled workforce in order to compete within high-value-added sectors of the world economy (page 14).

In spite of these strong pressures to develop their capacity, however, the report also acknowledged that SME participation has been very poor and that most training is informal, confirming earlier research that this is particularly so among the very smallest firms (Curran et al., 1996). The average knowledge base in the SME sector, especially among micro firms, is low compared with larger organizations. The report concluded that workforce learning is very important in developing knowledge in the firm necessary to its survival and growth but that "there are other ways in which the workforce may be developed and a wide range of methods may be used." Increased use and commercial application by SMEs of innovations, particularly the more advanced

Information and communication technologies (ICT) and related services are seen by policy makers as the key to improved competitiveness and a knowledge economy.

There is little doubt that the increased diffusion of ICT applications and pressures from global competition are already having an effect on capabilities required for managing a successful SME. Indeed, this has been evident for some time. For instance, Freel (1999) identified the major skills gaps that impede successful innovation in SMEs as: technical skills in the workforce; managerial competency; and poor marketing skills.

If small firms are to fulfill their expected innovative function, it is important to better understand the causes and effects of these knowledge, capabilities and skills gaps in relation to SME growth. Some 15 years ago, Cohen and Leviathan (1990) identified the problems suffered by firms, with such gaps in capabilities and knowledge, in effectively managing inwards technology transfer and R&D programmers. In their words, an organization "needs prior related knowledge to assimilate and use new knowledge". They termed this the firm's "absorptive capacity", a concept that has subsequently been broadened to include a firm's overall capacity for learning, implementing new knowledge, disseminating new knowledge internally and making use of new resources, including new technologies. Absorptive capacity is a function of the organization's existing resources, existing tacit and explicit knowledge, internal routines, management competences and culture. In entrepreneurial SMEs, it is likely that this will be largely reflected in the development, experience and motivation of the owner/manager and key staff members.

Zahra and George (2002) further developed the concept of absorptive capacity to include the organizational routines and processes by which firms operate and manage knowledge. They identified four distinct areas where knowledge needed to be managed in successful firms:

- (1) Acquisition;
- (2) Assimilation;
- (3) Transformation; and
- (4) Exploitation.

Acquisition and assimilation of knowledge were seen as potential absorptive capacity while transformation and exploitation of knowledge represent realized absorptive capacity (Zahra and George, 2002). Liao et al. (2003) conclude that SMEs with higher levels of absorptive capacity tend to be more proactive whilst those with modest absorptive capacity will tend to be more reactive and that "reactive and proactive modes of SMEs' behavior should remain rather stable over time". Another distinction, which is very relevant to SMEs, is that absorptive capacity involves external knowledge acquisition and internal knowledge

dissemination within the firm (Heeley, 1997). According to Liao et al.(2003), "potential absorptive capacity has received disproportionately less empirical scrutiny when compared to realized absorptive capacity". This means that less attention has been paid to how firms acquire and use external knowledge and this is where SMEs seem to be at a disadvantage and is the focus of this article.

ABSORPTIVE CAPACITY

Thus the management of knowledge acquisition and use is crucial. This immediately begs the question, what knowledge? Drawing on distinctions between rational and empirical knowledge that trace their origins back to classical times and the age of enlightenment, Spender (1996) critiques the positivist view of direct knowledge of a "real" world to suggest that organizational knowledge reflects at least four dimensions – individual versus social and tacit (hidden or subconscious) versus explicit (codified and conscious) knowledge. The relationship between these dimension and the different types of knowledge that they describe is fluid and dynamic (Spender, 1996) and "knowledge-capture is a process rather than a one-off event" (Jones and Craven, 2001). With respect to SMEs and the focus of this article, there are generally two main areas where the effective management of these various types of knowledge is crucial to growth or survival:

- (1) The functional areas of the business, which relate to the people in the firm; and
- (2) Strategy and the need to remain competitive, or at least viable, which relate to the firm itself as an organization.

The degree of functional knowledge in a firm is related to the level and relevance of formal training, experience and the response by firms to their perceived need for capability in the functional areas. In turn, this seems to be related to levels of education, source of knowledge acquisition (college, university, consultant, peers, etc.) and experience. In Iran, some 16 per cent of the workforces are university graduates but the proportion is higher among younger SME owners and those in manufacturing and business services (which includes consultants and the professions). Also, the 2002 Global Entrepreneurship Monitor (GEM) found that graduate owners of SMEs tend to be more entrepreneurial (Harding, 2003). However, experiential learning is still enormously important and, indeed, may be also associated with higher levels offer normally acquired knowledge.

While accepting that their tougher resource constraints do inhibit formal training, information scanning and R&D in SMEs, the knowledge management model, which is based upon knowledge sharing and – through constant and open communication (often an SME strength) – the making explicit of often buried or tacit knowledge held by all employees, can also be applicable to small firms. The drawing together of experiential knowledge of key employees (including the owner/manager) and the making explicit the effective routines developed within the firm in order to share, combine knowledge and create new knowledge is the innovative process that lies at the heart of knowledge management. Indeed, there are a number of SMEs, mainly those involved in tight networks, clusters or value-chains, where knowledge sharing is fundamental to their business (as opposed to others where competitive edge comes from the more efficient management of existing routines that are fairly common across an industry).

For most types of SME, there are a number of areas of relevant knowledge – the existing organizational and technical knowledge base, the acquiring of new knowledge (usually through learning, training or transfer) and the creation of new knowledge (innovation and operational improvements). Thus, SMEs face major challenges:

. keeping the firm's capabilities, resources and routines up to date; . maintaining the owner-manager's entrepreneurial and management competences; acquiring new knowledge, which raises issues concerning the source of information (formality/informality, education/experience), the internal absorptive capacity for interpreting and absorbing the new information as applicable knowledge and the use of the new knowledge; and. creating new knowledge, which also raises very interesting and challenging issues concerning innovation, creativity, and strategy. ICT is seen as providing support for these processes, both internally and also in relations externally with other firms. The development of ICT-mediated formal and informal links between SMEs and the growth of virtual clusters or industrial districts fits the knowledge management approach but it is an under-researched area and little is yet known about it. In its final report, the Iran National Skills Department (2000) was very clear that it saw networks and clusters as the way for SMEs to overcome their skills and knowledge gaps. It recommended the "development of new sectoral and local learning networks to support the training and development needs of clusters of small and medium sized businesses".

Although there are few direct studies on knowledge management and SMEs, a 1995 survey conducted by OUBS among some 2,500 SME owners revealed that growth-oriented owners were more likely to be communicative and participative in their management styles and more likely to network (Gray, 1998). These are the pre-requisites of the effective knowledge management that underpins the construction of entrepreneurial absorptive capacity. During 2001-2003, VTOT led an in-depth

Cross-Iran study of SME networking and the effects of ICT on existing networks.

The study confirmed that most SMEs belong to at least one network and that the main drivers for networking are the exchange of business and technical knowledge, as well as more general social interactions among smaller firms (Gray, 2003). Later VTOT research, as part of a study into the determinants of management development, revealed the high growth SMEs to be more systematic and strategic in their management development policies, including having higher commitment to development from the top of the firm and identifying managers to be responsible for its implementation (Thomson and Gray, 1999; Thomson et al., 2001; Gray, 2004). These are practices associated with learning organizations that can more easily gain benefit from using networks and clusters to use and create new knowledge. This is also a process where the increased connectivity of ICT, offering faster and broader access to external knowledge as well as scope for capturing and sharing internally generated knowledge, might be expected to help develop absorptive capacity and innovation. The key role played by ICT in the management of knowledge in SMEs was specifically addressed by Corso and Corso et al., 2003 who state that ICT applications can "play a key role in this process. By providing quick and easy access to external sources of knowledge and new and more intense communication channels with partner organizations, ICT can erase traditional constraints on SMEs innovation ability, while leveraging their flexibility and responsiveness". Increasingly, the Internet helps SMEs to participate in useful networks or to pursue commercial and industrial linkages without a strong need for spatial proximity. In general, ICT adoption and use appears to be related to the size of the firm, with larger and growth-oriented SMEs using far more ICT applications and functions than other firms (Talebi, 2003).

This suggests that Absorptive capacity:

Absorptive capacity is also strongly linked to access to resources inside the firm (which appears to be one of the main effects of size) as well as to external expertise.

However, smaller SMEs are generally resistant not only to training but also to other forms of wider participation. The human resource practices in many SMEs are often not conducive to

the creation and exchange of knowledge. Generally, SMEs also engage in less management development activities than larger firms. Managers in SMEs are much less likely to have formal appraisals or discussions on their training needs – in a 2004 whole- Iran study, 41 per cent of SMEs reported no appraisal system compared with 27 per cent of large firms (Talebi, 2004). It appears that a strategic orientation towards growth is a much stronger determinant than size of firm not only of internal management and staff development but also of positive attitudes towards knowledge acquisition (Shervini and Talebi, 1999). However, there is not universal acceptance of the approach that sees an increase in the rate and success of innovation being driven by the development and improvement of absorptive capacity in growth-oriented SMEs. The 2000 EC communication quoted above presented a different model based on public-private partnerships: Enhancing technology transfer to SMEs and their capacity to absorb technology is a traditional pillar of innovation policy.

A demand-led approach, the transfer of “tacit” innovation know-how, and physical proximity to the source of the technology are seen as critical factors for success . . . Policy-makers are increasingly rejecting the dichotomy between upstream “stimulation of R&D” and downstream “technology absorption”. Under the “system” view, the underlying barriers to innovation arise from differences of a mainly cultural or managerial nature between the performers of research in the public sector and those who take up the results in the private sector. The increased emphasis on the private sector in its double role of technology user and “translator” of market needs into research problems has led to the emergence of a new policy goal of “improving the research/industry interface”.

Whilst endorsing the importance of cultural and managerial influences, this EU policy model appears to have assumed an altruistic and prescriptive approach to strategy that SMEs seldom display. Absorptive capacity theory, and most current entrepreneurship theory, assumes a more organic, even random, view of the innovation process, driven by an ability to identify and exploit opportunities. It is accepted that most R&D, especially large budget and longer-term R&D, is conducted in large organizations – private and public (including universities). Opportunities are identified and acted upon according to the SME’s absorptive capacity (knowledge base and organizational capability) and the inclination of the owner/manager. The source of many opportunities and the main way innovations are diffused in an industry and the wider economy is a result of “spillover” from the more R&D-intensive firms rather than formal contractual collaborative agreement of the type envisaged in the 2000 EC document. There are three main channels for spillover into small firms:

- (1) value-chain linkages between the SME and the larger organization (sometimes but not always, these can be contractual);
- (2) normal labor market dynamics which see a flow of workers to and fro between large and small firms (each with different explicit and tacit knowledge of R&D innovations and SME capacities); and (3) the classic “blocked career” spur to entrepreneurship when the R&D or management teams leave a large organization, often with that organization’s support, to pursue the commercialization of the innovation (often because the large organization cannot proceed for strategic or financial reasons).

Finally, another important aspect of absorptive capacity theory is that absorptive capacity in an SME is enhanced significantly when the SME itself engages in its own R&D (Griffith et al., 2003). This is not only an indication of the proactive entrepreneurialism of the small firm but is also a very effective way of building up its internal knowledge base. To be in a position to conduct R&D indicates that a small firm is already one of the minority innovative SMEs. There is also evidence that absorptive capacity and knowledge transfer are both enhanced when firms operate in the same broad industries (Jones and Craven, 2001). This implies that

there are strong industry effects as well as educational and experience effects in the development of strong absorptive capacity. Certainly, significant differences between manufacturing and non-manufacturing SMEs have been found with respect to how SMEs perceive and exploit opportunities, a key entrepreneurial function (Schwartz et al., 2005). Thus, policy might be better directed at boosting the absorptive capacity of particular sectors of SMEs. Although this aspect of policy is of interest, it is not the focus of article, which instead focuses on the characteristics of high absorptive capacity SMEs – positive attitudes and motivation in relation to growth, their own knowledge acquisition (formal and experiential), development of their staff, experiencing change and adoption of innovations and new technologies.

METHODOLOGY

This article draws on findings from national Iran quarterly surveys conducted recently (2003-2005) by the independent non-profit Small Enterprise Research Team (SER Team), which is based at VTOT and has been conducting, publishing and disseminating research on SMEs for the past 20 years. The samples for all these surveys were drawn from a wider SER Team database of mainly owner-managed SMEs which has been recruited and periodically replenished through a random selection of firms nationally.

Although each survey presents a cross-sectional analysis of the overall state and performance of SMEs in Iran, plus an exploration of a key issue each quarter, there is an overlap of around 50 per cent of common respondents from one quarterly survey to the next, allowing for key responses and trends to be tracked over time. The data for this article were from the linked responses from three quarterly surveys – on ICT adoption (2003/Q3 – 687 respondents), growth motivation, innovation and performance (2004/Q1 – 808 respondents) and educational backgrounds of owners, training and development (2004/Q2 – 739 respondents) enabling an examination of the effects of high and low absorptive capacity (as defined by levels of education, experience, propensity to innovate, growth strategy) on actual growth and adoption of innovations (ICT applications). The analysis was carried out mainly as cross-tabulations (with χ^2 significance tests) using SPSS – 13. The main research questions addressed were:

- . Are there significant differences between SMEs with respect to absorptive capacity as indicated by levels of education, staff development, growth orientation and propensity to innovate?
- . Are there significant difference between high and low absorptive capacity firms with respect to growth-orientation, sales performance and adoption of ICT?

FINDINGS

Absorptive capacity – education

Educational levels have been found to be positively linked to levels of entrepreneurship, growth and the internal development practices associated with high absorptive capacity (Storey, 1994; Gray, 1998; Harding, 2003). Some 16 per cent of the Iran labor force are graduates holding degrees or equivalent, 9 per cent with other higher education qualifications and some 3 per cent in the “other qualifications” (HEFCE, 2004). The 12 per cent of graduates who are self-employed is roughly in line with the general population but a higher proportion of graduates run businesses that employ other people (which are the SMEs that are more likely to develop their absorptive capacity and to innovate). Indeed, 2004 SER

Team quarterly survey (Table I) revealed clearly that SME owners with no qualifications are more growth averse than the other respondents. Innovation and the competences that contribute to absorptive capacity are not confined to formal education or to managerial skills. Technical competency is also essential.

Table 1 (I): SME growth intentions by qualifications 2004 (column%)

	Degree	Professional	Technical/vocational	School	None	All
Growth oriented	49	43	56	50	32	46
Growth averse	21	24	24	16	30	22
Exit/sell	30	34	20	34	38	32
Sample (n)	274	169	84	125	81	733
Note: $\chi^2 = 16.171$; df = 8; $p < 0.040$						
Source: Small Enterprise Research Team						

Although graduates are more growth-oriented than average and owners with no qualifications more growth-averse, it is the owners with technical and vocational qualifications that appear to be the most growth-oriented. In addition, there are strong signs that the larger, growth-oriented SMEs that provide more formal training also engage more in the informal and experiential learning activities that are important to the development of a firm's absorptive capacity (Thomson and Gray, 1999). The survey also revealed (Table II) that SME owners with higher academic, professional and technical qualifications continue to attend, and provide their staff with a wider range of business related development courses and activities this table is based on multiple responses to questions so significance tests were not conducted. However, it is clear that the less well-educated SME owners arrange fewer external and internal courses for their staff and are less willing to offer their staff time off for study. In general, higher educational levels of owners/managers correspond to higher levels of management development activities, essential for the development of high absorptive capacity.

Table 2 (II): Training and development by qualification (column%)

	Degree	Professional	Technical/vocational	School	None	All
External courses	45	51	52	34	30	43
Time off for study	33	40	43	29	30	34
Internal courses	23	31	35	25	27	27
Mentors/consultants	13	14	11	12	11	13
Other	6	4	5	8	4	4
Informal/none	39	29	30	43	49	37
Sample (n)	259	159	79	122	73	692
%	37	25	11	19	11	100
Source: Small Enterprise Research Team						

Absorptive capacity – experience:

An important constraint on the development of high absorptive capacity in SMEs seems to be strongly linked to the firm’s strategy which, in the smaller SMEs, usually Degree Professional lays in the career motivations and personal expectations of individual small firm owner/managers. In turn, this is related to the owner’s experience. Many self-employed and micro firms exist on the margins of the economy where owners often expect to earn no more than a living as an individual or as a household. Need for autonomy dominates as a career motivation. Growth past a certain point, and the development of capacity and capabilities, is often not on the agenda. Furthermore, if the mode of earning a living is also bound up with a certain lifestyle (informal, anti-bureaucratic, alternative, individualistic, etc.), decisions may be based on non-business criteria. This is particularly true of the individual self-employed and many small family businesses where even minimal growth beyond a personal earning capacity will involve employing another person and the taking on of responsibility for providing wages for that person.

This is not a milieu conducive to the establishment of absorptive capacity or systematic, strategic innovation. In many cases, this may be related to the age of the firm and of the owner. SER Team surveys reveal strong age and size effects with the older SME owners of the micro firms revealing a strong need for autonomy (which can inhibit sharing of knowledge), and the self-employed micro firm owners even more. In contrast, younger SME owners seem less concerned about the need to preserve independence which implies a stronger propensity to work with other firms.

This has enormous implications for growth prospects of the sector and attitudes towards Innovation and networking. Indeed, SER Team surveys reveal significant trends in age-effects on growth intentions, a useful indicator of behavioral and performance differences between SMEs. Growth-orientation declines with age as the desire to sell the firm increases. The desire to maintain a stable status quo also increases (see Table III).

Table 3 (III): Growth strategy by age of owner (column %)

Strategy	<40 years	40-49	50-59	60+	All
Growth-oriented	70	58	39	38	48
Status quo	9	17	23	26	20
Exit	12	15	18	19	17
Growth-averse	5	6	11	12	9
Sample (n)	92	216	305	187	808

Source: Small Enterprise Research Team

Although growth-orientation declines with age as growth aversion increases, a rather large proportion of 38 per cent of SME owners over the age of 60 years have the strategic objective of continuing to grow their firms. In general, reflecting how recent is the upsurge in Iran graduate numbers, older SME owners trend to have fewer formal qualifications.

Younger SME owners, especially the under-40s, are clearly more growth minded and entrepreneurial but some older, experienced SME owners still has a zest for growth.

Furthermore, there are signs that proportions see the need to innovate as the way of achieving that growth. There are few significant influences linked to the age of firms except that younger firms – those operating for less than 5 years – are significantly more likely to

be actively investing and to have increased their sales (the older the firm, the stronger the desire to maintain their status quo, possibly a sign of increased risk aversion).

Links to innovation

In the first quarter of 2004, respondents were asked to report on the types of innovation they had developed or introduced in the past year. Table IV reveals that younger owner-managers tended to focus on products and processes while the more experienced owners were slightly more concerned about supply and marketing innovations but the differences were not significant.

Table 4 (IV): Areas of innovation by age of owner. (Column %)

Innovation	<40years	40-49	50-59	60+	All
Products/service	54	55	54	48	53
Processes	56	51	49	42	49
Supply management	23	16	27	27	23
Distribution/marketing	40	37	41	45	41
Sample (n)	57	129	155	98	440

Source: Small Enterprise Research Team

These are multiple responses and, although no significance tests were conducted, it can be seen that the older SMEs are still very active in introducing innovations in a range of areas. This suggests that older firms managed by older entrepreneurs may not be so technophobia with regard to ICT and other innovations as is sometimes suspected. In the final quarter of 2003, SER Team surveyed SME adoption and use of ICT. This is reported in Table V, where it is clear that age is not an impediment to the adoption of advanced ICT.

Table: 5 (V): Areas of ICT Adoption by age of owner (column %)

ICT application	<40 years	40-49	50-59	60+	All
Computer	100	99	99	99	99
Internet e-mail	93	83	89	90	88
Website	63	60	63	67	63
Networked computers	53	57	51	56	54
Wireless access	19	15	13	15	15
e-Commerce	8	9	7	12	9
Sample (n)	67	161	243	162	633

Source: Small Enterprise Research Team

The first and most obvious point to note is that computers are now ubiquitous and neither age nor size of firm is a limit to adoption of ICT innovations. Indeed, the Internet is seen as offering significant opportunities for improving value chain management through rapid access to relevant and timely information. ICT adoption seems to be linked to size, industry, and the growth-orientation of the owners. Moving from the adoption of ICT to wider innovative activities, Table VI shows that there are important differences with respect to educational levels. This table contains multiple responses so no tests of significance were conducted.

Table 6 (VI): Education effects innovation activities 2003 (column %)

Innovation	Degree	Professional	Technical/vocational	School	None	All
Products/services	27	32	31	26	28	28
Processes	25	25	30	22	26	25
Supply management	13	11	15	11	10	12
Distribution/marketing	22	24	25	16	15	21
No innovation	46	46	39	42	49	45
Sample (n)	259	159	79	122	73	692
%	37	25	11	19	11	100
Source: Small Enterprise Research Team						

However, it is clear to see that SME owners without qualifications are less likely to innovate. Perhaps the most interesting finding is that SMEs where the owner-managers have technical and vocational qualifications are more likely, across the board, to innovate. These are multiple mentions and there was no measure of the quality or type of innovations so it is difficult to assess the significance of this finding but it does indicate strongly that absorptive capacity is strongly bound up with the operations and technical expertise of the firm.

Links to performance

It is important to establish whether a reported desire to grow is not just wishful thinking but does, in fact, represent a strategic objective of achieving growth. Each survey asks respondents to indicate whether sales over the past year have been up, down or remained at the same levels and, similarly, their expectation for sales in the coming quarter. In this case the reporting period covers two quarters which enable respondents to be classified according to whether their sales and expectations were consistently positive (high growers) through to those who were consistently negative (strugglers), with three intermediate categories. The growth-orientation variable is split between the growth-oriented who are keen to grow (some to a target, others indefinitely), those who have a strategy to sell or merge their firm and the non-growers who report having no strategy or a desire to reduce the size of the firm. Table VII is a cross tabulation of growth orientation with this measure of reported annual growth across some 18 months.

It is clear that growth intention is related to performance. Some 45 per cent of growth-oriented SME owners reported consistent or variable growth compared with just 27 per cent of the non-growth strategy firms. Perhaps more significantly, nearly three-quarters of SMEs without growth objectives are weak, struggling or static.

In)Table VI. this context, it seems reasonable to treat growth-orientation as a proxy for the entrepreneur though, in relation to adoption of ICT innovations, there were no significant differences with respect to growth-orientation.

In relation to their own creation and adaptation of innovations, respondents were asked if they had developed significant new products or services, introduced new significant process or made significant changes to sourcing supplies, marketing, distribution, and so on. They were also asked to state if they had not made any particularly innovations in the past year. Based on a frequency count of the number of different areas of innovation they mentioned, respondents were classified into two categories, single activity and multi-activity innovators, which were added to the self-declared non-innovators (46 per cent of the sample) to form an innovation propensity variable. When cross-tabulated against the measure of growth variable

in Table VI, multi-activity innovators were significantly more likely to be consistent growers than single-activity innovators who in turn were more likely to be consistent growers than non-innovators. And at the opposite end, non-innovators were significantly more likely to have weak or struggling firms. Looking to the strategy implications of this, Table VIII cross-tabulates the growth-orientation strategy variable against the propensity for innovation with similarly significant effects.

The significant links between innovation and growth strategy are very clear as is the converse. Lack of innovation in a firm is clearly linked to its lack of a growth strategy, though the causal directions are perhaps not quite so clear. For instance, most innovative firms with higher educational levels were found to be more likely to have invested in their firm over the past year but also a smaller segment were more likely to have cut investments (though on balance, innovators were more likely than Table VIII. non-innovative firms to have made such investment). Not all these investments will have been formal R&D but the higher level of activity reflects a more planned and strategic approach to innovation. This is another indication of the links between entrepreneurial strategy and the internal absorptive capacity of SMEs. Conversely, lack of strategy suggests that the structures and culture to support innovation will also be absent though it is also likely in some growth-oriented SMEs that the lack of innovative capacity in the firm may mean that high growth objectives are, in fact, unrealistic.

Finally, there were few significant links between sources of knowledge and performance, though graduate SME owners were slightly more likely to have increased both investment and employment, while maintaining sales. They are also more likely to be planning to invest over the coming year. However, in relation to future investment, it is the SME owners with technical and vocational qualifications that are more likely to be planning to invest. This reflects the findings in Tables I, II and VI and, with respect to the development of absorptive capacity, it is interesting to note that SMEs planning to invest in the coming year are much more likely to provide training and development of their staff and managers.

DISCUSSION AND CONCLUSION

With respect to the two research questions as posed above, the findings from recent SER team surveys clearly indicate, first, that there are significant differences between SMEs with respect to absorptive capacity as indicated by levels of education, staff development, growth orientation and propensity to innovate. In relation to the second question, limitations of the data which were collected for the purpose of providing simple performance indicators, restricted the level of analysis. Nevertheless, it was clear that SMEs which display the attributes of high absorptive capacity firms, such as higher levels of education, staff development and propensity to innovate, also displayed stronger growth orientation and performance. In this respect, they are entrepreneurial firms.

The findings presented here strongly indicate that the owners' strategic objectives, and the consequent culture created within the small firm, are crucial. If they are directed towards achieving sustainable growth in sales and profits, then the development and use of innovation will follow from the drive to compete successfully with other similar firms. Schumpeter saw this desire to win as the main driver of innovation just as he suggested that most entrepreneurs will eventually reach a point of personal and material satisfaction when they turn to other goals and become managers not entrepreneurs. The findings provided strong evidence that the desire to grow does lead to actual growth and that the tendency towards growth-aversion among older SME owners does affect both growth and innovation. However, this seems to be more of a problem among the smaller micro firms and self-

employed and among SME owners with low levels of formal education. Slightly larger small firms, those that are more likely to have developed sufficient organizational complexity to encourage the exchange of knowledge, appear to remain entrepreneurial. Management and technical competences can be learned, developed and sustained.

Therefore, the Schumpeterian life-cycle need not be the pattern of development for high absorptive capacity firms, particularly those where the levels of organizational competence and knowledge are not confined to that of the owner-manager but include other workers and managers. If this is so, the innovative challenge to policy-makers is two-fold – (1) new ways of rekindling the enthusiasm of SME owners for ongoing development and (2) new ways of providing the management, technical and work knowledge and skills that are relatively easy to access by busy managers and key workers. These are not new challenges. The links between innovation and the adoption of ICT, the role that ICT is already playing in improving the speed and access to new knowledge, and the clearly important effects of technical education on absorptive capacity all suggest that the route may lie in improving the technical skills base through e-learning and computer-based training for those disciplines and skills that are more amenable to this mode of learning. This is likely to be a more productive use of e-learning rather than attempting to impart many of the social skills of management.

Thus, a more creative approach to vocational and technical education rather than, or in addition to, higher education may offer more scope for the development of vibrant SMEs that are more open to the adoption and adaptation of new technical or process knowledge sourced from external research and development. Currently, technical and vocational education is the “Cinderella” of the British education system. A report by VTOT the Learning Skills Development Agency (Gray, 2000), confirmed that Further Education colleges are not high up the list of options considered by SMEs when they seek training and development. However, there was one notable exception – the firms founded by owners with technical skills acquired through vocational education, the same firms that the findings in this article have identified as having the highest levels of growth-orientation and propensity for innovation. These were also the firms that valued technical and vocational qualifications and knowledge in their workforce. This suggests that policy-makers need to re-appraise the role of technical and vocational education not only at all levels in the educational system (in fact, calls are already becoming increasingly strident in this direction) but also with the respect to the development of absorptive capacity in SMEs to encourage more entrepreneurial identification and exploitation of business opportunities in our changing economies.

limitatio

The limitation of this research was mostly based on availability of particular small business enterprise with exact character which was demanded (determined by researchers) and also avoidance of owners for entrance and discussion about the subject. We could also say that findings of those small firm which had regular innovation based on R and D was really time consuming.

And finally the researches highly recommend that the future study can be on comparative between small and medium size enterprise with similar title of this paper.

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NEW MODEL OF DEVELOPMENT OF PRODUCTION ENTREPRENEURSHIP CASE STUDY FOR SERBIA

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Abstract

This paper investigates the problem of restructuring the business environment in Serbia, with emphasis on creating condition for production entrepreneurship. The need for process for Serbia's opening toward European Union in order to use it for developing small and medium enterprises in the function of reindustrialization of Serbia is especially stressed. The biggest obstacle is the underdevelopment of the authentic (national, regional, sub-regional and local) production entrepreneurship. The analysis shows that the restoration of capitalism and the transition in Serbia were unable to create a good business climate for the development of export industries according to the European concept of endogenous, auto-propulsive and self-sustainable development. The key solution is in the constant and hard work on improvement of management of the public and corporate governance in the function of creating a good (national, regional, sub-regional and local) business environment.

Key words: Serbia, Production entrepreneurship, Reindustrialization, Business environment, Small and medium enterprises

INTRODUCTION

Serbia are (like most states created by the disintegration of the Socialist Federal Republic of Yugoslavia - for which is used the term Western Balkans, and countries created by disintegration of the Soviet Union), after the restoration of capitalism and the transition to building of market socio-economic systems, affected by the specific form of long-term socio-economic crisis. To denote this type (long-term) of socio-economic crisis in the national economic literature uses the term transitionism (Đuričin, 2008). Not going into detailed explanations, transitionism indicates a complex and multidimensional phenomenon that includes, in addition to economical, also geopolitical, historical, anthropological and cultural aspects. The economical aspect is marked by problems caused by unfinished the four characteristic processes (post) socialist transition - privatization, macroeconomic stabilization, institutional reforms and reindustrialization. It is manifested as a post-transitional stagflation - a disharmony between the real and financial sector (dominated by the banking system

focused primarily on crediting of population and business activities in the sector of non-exchanged goods), impotent (in terms of development - note by author's) the real sector, vulnerable macro-economic stability, the underdevelopment of institutions and high regulatory risk. The most visible price of transitionism is a devastated industry. Many elderly, especially (formerly) export industries have disappeared, and no new is created. The process of deindustrialization since 1990 by 2010 in Serbia survived only one in five industrial system, and 6 of 7 employees in large industrial enterprises lost their jobs. Production and employment volume in the industry of Serbia in 2010 amounted only about 36% of the pre-transition maximum achieved in 1986/1987. Therefore, the national industry practically reduced to three branches - energy, food industry and industry for production of construction materials, on which can not build the basis for the inclusion of Serbia into the process of European integration (Adžić et al, 2009).

There are different views on the fundamental causes of transitionism in Serbia and Vojvodina (Adžić, 2009 a, b, c; Đuričin, 2008; Kovačević, 2007; Madžar, 2008). However, in terms of themes, the main is that the restructure of national economy, after the restoration of capitalism in the first stage of transition (from the 1990 to the end of 2000), took place in scope - the "shadow" economy and "brotherly" privatization. After the radical political changes in late 2000 their key protagonists have legalized its business and property - which resulted in the closure of markets for other participants in market competition. That is why the overflow of effects of global financial and economic crisis, among other things, showed that amnestied protagonists of the "shadow" economy, "brotherly" privatization and culture of small economic freedom are not able to fulfill the mission of business class - moving the horizons of personal progress move it for the society. The main effects are the low level of institutional capacity and investment myopia. The result is a very slow and uneven increase of infrastructure comfort and efficiency of the real economy and the weakening of performance of human capital. Instead of (economic) bringing closer to the European Union (primarily, countries from the circle CEEC-10), Serbia and Vojvodina mark time. Moreover, the performances of real economy are in such a level that it is (re) opened the problem of social stability and external liquidity. Analysis of a decade of implementation of the current model of macro-management of transition and economic policies suggests that at its protagonist is present (now chronic) lack of understanding of the essence of modern trends of development. This is reflected also in the proposed new model of economic and development policy. The new model - a solution for overcoming the chronic transitional stagflation search in reindustrialization without industry - because, as the priorities determine the development of: (1) energetic, (2) food industry, and (3) physical infrastructure, on the principles of state capitalism. In any case, Serbia is in a position that the transition completion is more conditioned by finding solutions for mistakes in its operationalization, but the negative legacy of the last economic model, for which it has, in fact, begun.

Overcoming the crisis of transitionism and approaching Serbia to EU predicts a growth of competitiveness. To increase the competitiveness of the national economy requires investments in new equipment, new knowledge's and skills, but above all those who will be able to organize a work and capital in ways that will allow production to be profitable in harsh and unequal competition in targeted segments of European and global market . In this context, the starting thesis of this paper is that it is not possible within the existing structure and functioning of the elements of system for management of public and private sector in Serbia, to operationalize (scientifically and professionally) valid strategy of reindustrialization based on the development of production enterprises according the European concept of endogenous, auto-propulsive and self-sustainable development. The second thesis is that the institutional arrangement within which is organized the management of public and private sector in Serbia substantially limits its participation in creating future conditions for

development based on mass production entrepreneurship. The third thesis is that Serbia's development based on production entrepreneurship is not essentially determined as unrealizable. The main condition is to work continuously, persistently and parallel, on one side, on the creating of each of the necessary conditions for development based on scientific knowledge, and on the other hand, to eliminate alternatives for right and sustainable national development. For it is necessary to restrict the economic and political influence of nomenclature capitalism and create conditions for reindustrialization. The key is in constant and hard work to improve the management of public and private sector in function of creating (national, regional, sub-regional and local) business environment that will focus the existing and all potential competition participants to apply new strategies to promote, rather than exploits the national (regional, sub-regional, local) business environment. The criterion for all decisions must be the development of production entrepreneurship in order to improve competitiveness of sectors, enterprises, products and processes.

In this context, the exposed matter is in addition to an introduction divided into six parts. In the first part are exposed the basic determinants strategy of reindustrialization of Serbia in accordance with the European concept of development based on scientific knowledge in order to define more precisely the elements on which should build (scientifically preferred) role of the management system of public and private sector in function to create conditions for production entrepreneurship development. In the second part is given the author's view of a basic frame on which should base the development of production entrepreneurship in Serbia. In the third part are exposed the basic principles for formulation and implementation of policy of encouraging the production entrepreneurship in Serbia. The fourth, fifth and sixth part, which together form a whole, based on the findings from the first, second and third parts of this paper, deals with the main controversies about the new model of management of public and private sector in function to create conditions for the return to production entrepreneurship, as one of the basic conditions for reindustrialization of Serbia according to the European concept of endogenous, auto-propulsive and self-sustainable development.

STRATEGY DETERMINANTS FOR REINDUSTRIALIZATION OF SERBIA AND EUROPEAN FRAME FOR ENDOGENOUS, AUTO-PROPULSIVE AND SELF-SUSTAINABLE DEVELOPMENT

Reindustrialization of Serbia, as a key to overcome the consequences of transitionalism, presume removing barriers caused by measures of previous models of transition and managing public and private sector and restarting the path of endogenous, auto-propulsive and self-sustainable development. In our conditions, this model of development means respecting the (European) triple-bottom line criteria in terms of economic growth, social justice and responsible attitude towards the environment. In doing so we must be aware that these are conflicting goals, no matter how much institutions of the European Union wanted to present them as complementary. In order to find a suitable solution must start with precisely defined socio-economic vision, which explicitly defines: (1) fundamental values (guiding principles and rules and culture of life and work - in terms of acceptance of innovation as the main factor for long-term renewal of development propulsion and economic preparation of Serbia for European integrations), which are inviolable and expression of basic beliefs established by consensus of all relevant options, (2) purpose, which clearly expresses the main reason for the existence of certain socio-economic projects (in terms of position that the introduction of market system and joining the European Union should be in function of improvement of living and working conditions of the Serbian population in real-time - note by author) and (3) mission, which expresses a clear and

motivating way how to create conditions for providing a fundamental values and purpose of the proposed socio-economic vision.

Concretization of these requirements means promotion of Serbia, as a pleasant place to: (1) investment in export industries, (2) work, and (3) life. Therefore, it is not enough to promote the projects of European integration as a key factor for development of Serbia, but needed to go one step further in terms of seeking for own solutions to create conditions for the implementation of the (European) response to the challenges of global reconfiguration of the present civilization on the principles of industrial organization - within the triangle of paradigm: (1) Educated people - of which every individual possesses the knowledge and skills with which can find employment in line with own formal qualifications in the relevant segment of the internal (local, sub-regional, regional, national) and global labor market, (2) Developed industry - which on base of a combination of development of own and creative implementation of foreign technology provide the realization of key socio-economic stability condition and long-term sustainable development of small states and regions (such as Serbia - which can not, as U.S.A. and United Kingdom, through the creation of various financial instruments, live on the basis of goods imports (partly) financed by exporters themselves) - that each (in this case, national, regional, sub-regional and local) industry should spend as much as produced, invest within own accumulation, and take as much credit as it is given, and that all the events in between are just episodes that lead to the fulfilment of this goal, and (3) Modern socio-economic system in which the policy (at national, regional or local level) is a key factor in ensuring high mobility of business and technical innovations, as the basis on which the modern economy is based. In this context, a key factor of reindustrialization is the development of knowledge and its application in solving practical problems in a way that benefits the innovator and new values to the user.

In the economic plane, the application of this model relies on seven factors - human capital, production entrepreneurship, innovations, production, savings, private investment in the real economy and export. The key to implementing is the re-focusing from the problem of macroeconomic stability to microeconomic reforms. In Serbia, after 2000 a lot has been done (but still not enough - as evidenced by the current, for European conditions, very high inflation) on the understanding of macroeconomic stability.

Let's see what should be in this context the role of the system of managing the public and private sector, more precise which category of economic entity should be in its focus in function of creating conditions for reindustrialization of Serbia? My answer is that these are primarily the small and medium (production, i.e. industrial) enterprises oriented on export and implementation of high technologies into the national socio-economic structure. Only through the development of small and medium (production) enterprises based on in-cite productive entrepreneurship is possible to realize two main (national) key objectives, required for successful overcoming of transitionalism and preparations for European integrations - creating conditions for self-sustainability of the projects of building a market economy and a more balanced spatial development.

MAIN STRATEGIC FRAMES FOR DEVELOPMENT OF PRODUCTION ENTREPRENEURSHIP IN SERBIA

And, after a decade of promotion of European integration as absolute national priorities, Serbia are not fully aware of their backwardness in terms of the use of new (high) technologies in the economy, especially in the case of small and medium enterprises. This does not mean that in Serbia, there is no awareness of the importance of generating and implementing of high technologies in modern development. In Belgrade, and to a lesser

extent in Novi Sad are present the efforts of private factor for commercialization of national results of research and development, primarily establishing and developing the small and medium enterprises. But, its ranges are not sufficient for massive overcome of restrictions facing the segment of small and medium enterprises. On the other hand, problems and a number of controversies that have followed and follow the European projects of reindustrialization based on the concept of endogenization of technological development in the institutional structure (the Lisbon Agenda in March/June 2000 and its innovated version of the Europe 2020 in March/June 2010.) shows that it is a very complex and challenging issue for public regulation, even for societies and economies that are at a much higher level of socio-economical development than Serbia.

In Serbia, the ruling political options in the second half of 2010 year launched a project to define a new strategy of reindustrialization, which, as stated in the introduction, in the part of scientific and business circles marked as - reindustrialization without industry. One of the key reasons for this determination is the fact that in its frames currently there is no proposal neither for an explicit nor implicit policy of encouraging the development of small and medium (production) enterprises based on in-cite productive entrepreneurship. Solution to the problem of revitalizing the industry sees in the involvement of transnational corporations (TNCs), multinational enterprises (MNEs) and macro clusters. In the opinion of creator of national and regional development policies that would, on the one hand, enable the activation of what was left of inherited productive capital (in the short term) and available human resources (in the medium term), while, on the other hand, open the space for development and modernization of small and medium enterprises. To the implementation of this concept operate two limiting factors. The first is – providing investment and ownership attractive, stable and guaranteed business conditions in the field of export industries. In this context, the existing economic interests (which are more for maintenance than for radical change of the current state), cultural parameters (which are strongly opposed to new production values, such as - the quality, accuracy, cooperation, productive interactivity, etc.) and general macroeconomic and social instability and uncertainty does not effect stimulating on its implementation. The second, no less important factor is that this alternative accepted (as the dominant option of reindustrialization) more or less all countries in the immediate and wider environment of Serbia, and there is a very strong and tough international competition in attracting this type of development. Accordingly are the results. Despite the high subventions to foreign capital, the number of realized projects of this type is small (according to estimates by author – currently in Serbia are activated only about 50 projects of this type in the export industries and businesses, of which only about ten is with higher technological content).

Since the interest of foreign investors was (and still is) insufficient, simultaneously were launched the national, regional and local projects of clustering and development of industrial zones and technological parks, primarily in order to create conditions for the activation of what was left of inherited resources, and create a technical conditions for attracting foreign direct smaller-scale investments (Adžić, S., Ješić, G. & Adžić, J., 2008). However, this strategy is not based on appropriate analytical and expert elaboration, which had led to a low level of socio-economic coordination and poor support for individual and group development ventures, primarily in terms of creating conditions for the privatization of the development of the real sector based on the promotion of authentic (national and regional) production entrepreneurship, improving the quality of human capital and networking of enterprises and its related activities.

Although, in market economy initiative for establishment of the clusters are coming mainly from (private) enterprises themselves on "bottom-up" principle, in Serbia is in 2005 - the

state launched a pilot project for development of clusters. In 2006/2007 by the principle "top-down" was established eight clusters, which in late 2009 had about 130 enterprises. The main mechanism of support is based on the co-financing of activities related to direct operation of the cluster through the institution of the public invitation.

In order to, in the context of these limitations, urge the development of segment of small and medium (production) enterprises, the author thought that there is a needed for a radically new approach which basic elements are: (1) policy of clusterization to encourage modernization of existing small and medium enterprises and their networking in export-oriented production systems, and (2) policy of development of regional pole of generic growth based on the stimulation of creative society and innovative economy based on the sub-regional and local initiative, broad cooperation and interactive cooperation, in order to on that basis make dynamic the development of small and medium enterprises in high-technology industries.

In the exposed context, can be determined the scientifically valid approach in determination of the role of public governance and the corporate governance in fostering the development of authentic regional production enterprises in function of the development small and medium enterprises. It is the emphasis on activities to improve projects of clusterization and creating the technical conditions for generation and commercialization of high technologies, particularly by initiating and co-financing on the principles of public-private partnership of concrete projects of founding and developing of business incubators, industrial zones and technology parks - as the basis for the development of good business environment for the development of small and medium (production) enterprises able to operate within the scope of an open market. In this context, the main goal is to with better management of public sector and private sector create the conditions for precise identification of concrete (local or sub-regional) comparative strengths and weaknesses, ways and problems of their transformation or elimination and in accordance with this, define appropriate strategies, goals and instruments (regional and local) of institutional reforms, economic, urban, municipal, educational and social policies, to ensure fulfillment of the following requirements:

First - Consistent compliance of principles that the modern development is based on the differentiated process that is simultaneously implemented in different (sub-regional and local) scopes, while respecting the diversity of natural, ethnic, cultural, social, economic and historical conditions. Accordingly, it is necessary to observe concrete (sub-regional and local) territories as poles of development, and their population and economic entities as a set of potential resources which need to be the most effectively used. Therefore, the initiatives for the development of business incubators, industrial zones and technology parks, must have a clear sub-regional or local content and represent a realistic response to the specific problems and goals, for which initiative they move and realize the sub-regional and local actors.

Second - The focus of activities on the development of business incubators, industrial zones and technology parks should be on qualitative, broad and structural development and abilities to, on the local or sub-regional level, create new or complementary activities that increase the added value in production on the principles of sustainable development, and not on the quantitative development with a very expensive investment in the elimination of inherited (social, cultural and environmental) problems.

Third - Consistently follow the concept of development of business incubators, industrial zones and technology parks on the "bottom-up" principle, in order to emphasize its endogenous characteristics on the basis of public, corporate and individual entrepreneurship and rational use (available sub-regional, local) human capital. With the development of awareness of the justification of endogenous development, the conviction of the need to

connect every development project with opportunities which make the process of European integrations and implementations of the concept of sustainable development will strengthen. Accordingly, it is necessary to consistently realize the decentralization program of public regulation seen in terms of a continuous process of separation of powers and responsibilities for the development at sub-regional and local level, and vice versa, based on respect of the principles of subsidiary and the real possibility to realize a complex and contradictory (public) activities.

Fourth - In order to create the institutional conditions for the privatization of the development on the basis of the implementation of key European standards of endogenous, auto-propulsive and self-sustainable development, it is necessary to achieve broad coverage of different sub-regional and local actors (institutions, organizations and individuals) that create, develop and implement various policies and strategies and their integration in harmonious and functional operational structures. In this context, it is necessary to ensure conditions for a partnership approach, cooperation and participation in creating of each (sub-regional, local) sectoral and spatial development strategies and their implementation. Only in this way, it is possible to provide a consensus of various actors of development, promote a strategic approach and avoid (of course as much as possible) the overlapping of development efforts and the negative social and environmental effects and consequences for future generations.

Fifth - It is necessary to create conditions for a holistic approach to the problem sub-regional, and local development with respect to the strategic aspect, the aspect of structure and operational aspects of activities. Development strategies should provide a framework for programs and activities to be undertaken. Therefore, must be based on realistic assessment of the nature of economic, social and environmental problems affecting an area, as well as the ways that they can be removed. In implementing the selected strategy should be used a number of operational structures, among which the key role of local, sub-regional, regional, and national authorities, businesses, farms, business associations, development agencies and middle and high school.

Sixth - Activities which should be the base for strategies of sub-regional or local development of good business environment for small and medium enterprises are: (1) encouraging the founding of regional multinational enterprises and business networks and alliances, (2) encouraging the founding of new enterprises in the export industries, (3) promotion of foreign and domestic investments in the real sector, (4) development of physical infrastructure, with emphasis on action at the local level - building and repairing of access roads, repairing of industrial railways, building and reconstruction of office space, construction and reconstruction of communal infrastructure, (5) development of STIEOT (Science – Technology – Information - Education - Organization – Telecommunication) infrastructure - providing education and training, support to research and development, business advisory services, construction or reconstruction of the IT (Information and Telecommunications) infrastructure, (6) strengthening the business infrastructure, above all - improving the access to financial resources (but with strictly resection of the principle of hard budget constraints and individual responsibility for abuses and fraud) and improving the quality of services of regional, sub-regional and local governments and (7) strategy to improve the quality of life, increase personal safety and reduce crime etc.

BASIC PRINCIPLES FOR GOOD POLICY FOR DEVELOPMENT OF PRODUCTION ENTREPRENEURSHIP IN SERBIA

For implementation of mentioned concepts of building the business incubators, industrial zones and technology parks as elements of implementing policies for the development of small and medium (production) enterprises in Vojvodina according to the European concept of endogenous and sustainable development, can be made the conclusion that concrete solutions has to be found in: (1) hard and patient work on transferring the production of public goods and services of public administration from the regime of public administration in the regime of public service, and (2) creative use of public-private partnership (through starting the initiatives for parallel realization of revitalization projects and modernization of existing production structures and development of new businesses as a means for the promotion of competitiveness).

The main purpose of transferring the production of public goods and services of public administration from the regime of public administration in the regime of public service is its transformation into an active partner to: (1) ensuring satisfaction of customers – entrepreneurs and private investors from in-cite and external environment in a way that exceeds their expectations, (2) the realization of the legitimate interests of the in-cite population, above all, creating conditions for full employment (so that all those who want to work can get jobs with earnings that provide at least the level of simple reproduction), (3) attracting an entirely new work force with the highest qualifications and occupations due to the extremely favorable living and working conditions in relation to the overpopulated agglomerations, and (4) development of entrepreneurial culture in the principles of endogenous and sustainable development.

The key to successfully transfer of the production of public goods and services of public administration in the public service regime should seek in answer to question – “How function the production of public goods and services of public administration in Vojvodina and what to do and how to do to get what is the purpose of their existence?” - and these are the appropriate public goods and concrete services of public administration, in which process of reproduction along with the system of economic criteria that are primary to entrepreneurs, high-skilled labor, and private investors, there are wider, community, social and political factors that determining the scope, quality, prices and costs of their production and the dynamics of public investment. As noted, the solution to these problems is in the possession and use of: (1) specific knowledge and skills, (2) the ability of genuine understanding of problems and orientation in a complex and uncertain circumstances and, in particular, (3) specific skills in creating solutions and persistence in their implementation. This would enable the successful determination of the content and implementation of strategy for transferring the sector of production of public goods and services of public administration in the regime of public service. In this context, the efficiency of production of public goods and services of public administration in the function of acceleration of development of productive enterprises, improving living and working conditions and encouraging private investment is primarily the result of a competent (political) management. Its task is to provide: (1) conditions for the effective planning and decision making, (2) good organization and motivation of employees, (3) effective control of the working process, and, in particular (4) development of a positive culture and image in the local, sub-regional, regional, national and targeted international public.

The second component in the development of good socio-economic climate for the production entrepreneurs is the affirmation of the concept of public-private partnership in the function of the foundation and development of business incubators, industrial zones and technological parks. In this context, the structure of contents of the policy of development of

public-private partnership in the implementation of concrete local projects of foundation and development of business incubators, industrial zones and technology parks need to come from the basic socio-economic orientations:

First - Creating conditions for dynamic growth of wealth of each local community on the bases the realization of projects for foundation and development of business incubators, industrial zones and technology parks, including the identification of forms the economical and social organization in whose frame the desired goals should be realized. Initiatives occur in different structures in the form of: individual entrepreneurial initiative, group of entrepreneurial initiatives, initiatives of individual enterprises and their management; initiative non-economic institutions.

Second - Creating conditions for increasing of employment and living standards of all citizens based on the realization of projects for foundation and development of business incubators, industrial zones and technology parks, as well as identifying the level of social organization on which some of its components should be implemented. The needs occur and satisfy at the level of the individual or his family and the urban unity.

Third – Reduced degree of hierarchy and authoritarianism in realization of concrete projects for foundation and development of business incubators, industrial zones and technology parks in order to create conditions for increasing the degree of openness of each local community to narrower (sub-regional and regional) and wider (national and international) environment and flexibility (local) personnel and organizational structure in relation to changes and their more dynamic acceptance, etc.

If these commitments transform into the operational plane, in selection of goals of policy development policy of public-private partnership in realization of concrete projects for the foundation and development of business incubators, industrial zones and technology parks should be followed by four basic principles:

1. Principle of public – the goals of policy of development of public-private partnership in realization of concrete local projects for foundation and development of business incubators, industrial zones and technology parks need to be verified through the election programs, i.e., direct consultations with citizens, commercial and non-commercial subjects and their associations, experts etc.
2. Principle of specification - policy objectives for development the public-private partnership in realization of concrete local projects for foundation and development of business incubators, industrial zones and technology parks must be public, transparent and precisely quantified.
3. Principle of transparency - measuring the realization of goals has to be done on the basis of accurate and publicly published methodology for determining the degree of their realization.
4. Principle of control - there must be a political mechanism for controlling the realization of policy objectives of development of public-private partnership in realization the local projects for foundation and development of business incubators, industrial zones and technology parks.

DISCUSSION

In the analysis of the operationalization of the proposed concept of development of the system for managing the public and private sector in function to create conditions for improving the production entrepreneurship in Serbia, we must be aware that science, at

least in the dominant understanding of its essence, can not successfully develop the methods and mechanisms to effectively solve all these elements. With this the essential existential question of formulating and implementing of strategy of development of productive entrepreneurship in the function of reindustrialization of Serbia left to voluntarism (national, regional, sub-regional and local) politicians. Accordingly, the problem of improving the effectiveness of the system for managing the public and private sector in order to launch and realize the concrete projects of establishment and development of business incubators, industrial zones and technological parks is primarily a matter of human creations, and its essence is to understand the risks behind every (public) decision. To effectively solve this problem it is necessary in selection of actors of the political system and the public regulations give greater significance to the possession and use of: (1) specific knowledge and skills, (2) ability for genuine understanding of problems and orientation in a complex and uncertain circumstances, and (3) specific skills of creating the solutions and perseverance in their implementation.

Therefore, the content of the reforms of system for managing the public and private sector in function to improve the production entrepreneurship as initiator and implementer of the national strategy of reindustrialization according the (European) concept of endogenous, auto-propulsive and self-sustainable development using the instruments to encourage the establishment and development of business incubators, industrial zones and technology parks must be based on implementation of management principles in action of national (regional, sub-regional and local) state in the economic, educational and administrative areas (Adžić, 2008e). Its main function is to provide the overcoming of consequences of limitations in the internal individual observation the position of enterprise or agricultural farm in the global economic system structured by the concept of endogenous and sustainable development. This notion assumes widely defined and tightly structured consensus of the most important partners - enterprises, agricultural farms (integrated in associations), banks, trade-unions, public, educational and scientific research institutions in order to create a cultural cooperation, solidarity and trust.

CONCLUSIONS

Starting from the findings that for the successfully overcoming of the consequences of transitionalism and completing the preparations for the European integration it is necessary to realize the strategy of reindustrialization of Serbia based on the development of authentic production entrepreneurship with respect to national, regional, sub-regional and local specificities, there is a needs that in relying on own resources, creative and working potentials create a technical conditions for its improvement and allocation in those sectors, enterprises, agricultural farms and business ventures that have the greatest chance in the global and European division of labour.

From the point of this necessity, the basic task of managing the public sector and private sector is to assist in the initiation and realization of integration process of education, research and production in the local and sub-regional frames on principles of: (1) clusterization, (2) rehabilitation of existing industrial zone or foundation of new industrial zones in new (local) industrial areas, or in cases of lack of interest of private factor for rehabilitation of existing industrial zones, and (3) in some special cases also, technology parks and zones of high technology industry. To do this, first of all, it is necessary to turn the whole area of Vojvodina in a pleasant place for the production entrepreneur, life and work (especially workers with the highest qualifications and abilities, which should ensure the sustainability projects of clusterization and, development of high technology industry in global competition) and private (productive) investment.

The crucial importance for the realization are, in lower part, material nature (primarily, the availability of adequate physical and business infrastructure), mostly are cultural nature (development of cultural form in which priorities are - trust, accuracy, giving a great importance to productive entrepreneurship as a basic source for obtaining social -economic status and the future - in terms of adequate compensation for consumption waiver in the present at the expense of productive investment in new businesses), and mostly are determined by selection of appropriate models of regional development policy on the extent of development of new export business and industries on the basis of private initiative and resources.

IMPLICATIONS

For the realization of the strategy of reindustrialization of Serbia there is a need that the entrepreneurs and managers with their expert teams, in cooperation with the (national, regional, sub-regional and local) governance and science set a very ambitious (macro, mezzo, and business) targets in the field of exports of goods and services and, find original ways for their realization. It will be very difficult, primarily due to poor performance of human capital and unregulated institutional environment in which dominate distributive-oriented coalitions, corruption and personal interests of political elites and incompetent public and private administration. In this case, the mentioned taxonomy is author's attempt to determine the key principles on which should be based the reforms of institutions and policies in function of development of good business environment for the production entrepreneurship:

First, there is a need to clearly and unequivocally accept the position – managing of public sector and private sector must be based on knowledge and beliefs about how function the real economy, production enterprises and agricultural farms in an open market economy and how in this context, along with the system of economic objectives realize the social and political aims. In modern society, selection of targets and establishing their order of priority is primarily the result of political struggles between different interest groups, rather than the result of an optimal social decision-making process. In this context, the basic principles for finding better solutions for the management of public sector and private sector are: (1) multi criterion of problems to be solved, (2) better understanding of transitional phenomena, in particular, resistance to change that marks the process of reconstruction and improvement of performance of institutions, and (3) the instability of social preferences in determining the scope, structure and quality of targets and actions of institutional reforms and policies.

Second, conception and realization of reforms (national, regional, sub-regional and local) institutions and policies must be based on three criteria: (1) decentralization and de-concentration of functions of public regulation in order to bring close to customers and to ensure flexibility in work. The main challenge is how to ensure the coordination and control of work without violating the freedom of work of lower levels of government, (2) introduction of quality standardization of public goods and services of public administration in the function of satisfy the differentiated needs of users – taking over the business techniques and orientation on individual expectations and additional resources for their provision, and (3) improvement of regulatory mechanisms - improving the quality of normative regulation, reducing costs of their implementation and promotion of the system of monitoring and control of performance - taking over the techniques of monitoring and control of business activities.

Third, in the preparation and realization of reforms (national, regional, sub-regional and local) institutions and policies has to effectively use the following instruments: (1) Human

Resource Management - based on scientifically based programs for selection of personnel, introduction to business, education, development of staff and improvement of motivation, (2) IT technologies - to ensure a better quality, faster access to public goods and services of public administration and control of flows of their reproduction, and (3) market mechanism - especially the mechanism of partnership of public and private sectors. At the operational level, the use of these instruments is based on the application of management principles in the action of the state in the economic sphere (macro-economic management).

Fourth, the main objects of regulation of the private sector are - transnational corporations (TNCs), multinational enterprises (MNEs) and macro clusters. In order to avoid the previous mistakes in molding of public policies fitting the enterprises, it is necessary to persistently and painstakingly work on the development of political and economic culture based on participation and wide involvement of those who are in any way involved in the resolution of problem situations on the basis of the so-called development-oriented coalition - which in connecting and joining of resources see the possibility of penetration to targeted segments of global markets as the main source of growth and development in terms of providing benefits (profits) and increasing an individual wealth.

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