CONTENT

AUTUMN MESSAGE .......................... 2

PAPERS
Green SMEs in the European Union ............................................ 3
Antal Szabó

The Economic Recovery, Including SMEs Sector, is Secured .... 14
Prof. Dr. Miroljub Hadžić and Petar Pavlović

Strengthening the Resilience of Small and Medium-sized Enterprises ........ 22
Mirjana Radović Marković, Muhammad Shoaib Farooq and Dušan Marković

New Proentation on Entrepreneurship and Business Education at the Petru Maior University of Tirgu Mures ............................................ 29
Daniela Stefanescu

Water – The Essence of Growth ............................................ 36
Zsuzsanna Nagy-Kovács and Prof. Dr. Katalin Takács-György

From and NGO and Donor Dependance to a Sustainable Social Enterprise ........ 43
Michael Hopkins, Bob Munro and Martin van Straaten

The Role and Impact of Fairness on Cooperation in Hungarian Metal and Machinery Supply Chains ............................................ 48
Dr. Noémi Piricz

NEWS

Photos on the MEB2017 Conference About ............................................ 54

INSTITUTIONAL PROFILE

Estonian Business School ............................................ 55
Budapest Enterprise Agency ............................................ 56

NEW EVENTS – CALL FOR PAPERS

2017 SME Assemnly Estonia ............................................ 58

NECROLOGY

Ing. Marian Gál ............................................ 59
AUTUMN MESSAGE OF THE SCIENTIFIC DIRECTOR

Distinguished Readers and Friends,

This special issue of the ERENET PROFILE contains papers on entrepreneurship, SMEs and industrial branches presented by the participants of the ERENET Session of the 15th International Conference on Management, Enterprise and Benchmarking - the MEB 2017 - at the Keleti Faculty of Business and Management of Óbuda University in Budapest. All papers are presented in a special proceeding book with under the issuing number ISBN 978-963-449-027-2.

15 years ago the Keleti Faculty of Business and Management of Óbuda University created a tradition with publishing the volume of “Management, Enterprise & Benchmarking in 21st Century”.

The growing international competition in the economical arena has created a demand to establish a forum several years ago in order to improve quality and education efficiency on the field of management, enterprise and benchmarking. The aim of the conference was to provide researchers and practitioners from higher education, academia and industry with a platform to report on recent developments in the area of economy.

The key topic of „Management, Enterprise & Benchmarking in the 21st Century” conference was “Global challenges, local answers”. Tutors and researchers of 13 international and 8 domestic higher educational institutions from 11 countries try to answer the questions with 47 new studies. The volume contains the edited and reviewed materials of the best presentations of Management, Enterprise & Benchmarking Conference.

Professor Dr. István Takács expressed the effort of the committee chairs and committee members, and all those persons responsible for the background activities from local arrangements to conference secretariat. Especially we thank to

- Dr. András Medve, Dean of the Faculty who supported the organisation of the MEB 2017 Conference.
- Kata Hanna Báló, Éva Beke, Tímea Edőcs and Alexandra Vécsey, who worked hardly for the success of the conference as well as for this volume,
- Dr. Antal Szabó Scientific Director, who promotes our issue among the members of ERENET (Entrepreneurship Research and Education Network of Central European Universities),
- Dr. György Kadocsa, whom thoughts gives the basis of the preface of this volume, and
- furthermore to all collegues, who’s sacrificing work contributed to the publication of this volume.

Dr. Antal Szabó
Scientific Director of ERENET
Dr. Antal Szabó  
Scientific Director of ERENET Network  
Budapest, Hungary  
E-mail: erenetszabo@gmail.com

GREEN SMEs IN THE EUROPEAN UNION

ABSTRACT

The paper presents the definition and concept of the green economy based on the concept of the United Nations Environment Program, which is improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. The green economy incorporates means achieving sustainable economic development in areas as improving human well-being, increasing social equity, reducing environmental and ecological risks.

The paper highlights the eco-innovation by the European Commission DG Environment and the project aiming to compile the Eco-Innovation Observatory. The holistic approach of the eco-innovation process is presented. The “green transformation” is a significant business opportunity for SMEs themselves as important suppliers of goods and services. The European Commission has recently prepared a Green Action Plan (GAP) for SMEs, which give a clear direction and framework for aims to (i) improve resource efficiency of European SMEs and (ii) support green entrepreneurship. The GAP aims to contribute to the re-industrialisation of Europe by enhancing SMEs competitiveness and supporting green business developments across all European regions.

Finally the paper presents the main European green entrepreneurship and business awards.

KEYWORDS

Green economy, eco-innovation, Eco-Innovation Observatory, European Commission green action play, green SME awards

JEL Code: Q2, Q38, Q58

Motto:
“we do not inherit the Earth from our ancestors, we borrow it from our children”
Native American Proverb

PREFACE

With over 7.4 billion people in the world today, human consumption of natural resources has increased exponentially in recent years to the point where our natural resources are insufficient to keep up with demand. This ever-increasing human consumption, the solid waste produced by the world population as well as the industrial waste have engendered ecological scarcity and aggravated the deterioration of our environment. According to the Global Footprint Network, the humanity uses the equivalent of 1.5 planets to provide the resources we use and absorb our waste. This means that the Earth takes one year and six months to regenerate what we use in a year. In this respect the sustainability is a matter of life and death for people on the planet. It is a necessary must to end the overshoot, and consider the environmental issue – addition to keeping the peace as primary goal - as the most important task for the mankind.

1. THE GREEN ECONOMY
There is no single definition of the Green Economy. Instead, the Green Economy is viewed as a unifying articulation of **Sustainable development**.

**United Nations** defines the concept of a green economy “carries the promise of a new economic growth paradigm that is friendly to the earth’s ecosystems and can also contribute to poverty alleviation.”

Environment can no longer be treated in isolation from mainstream economic policy. In spite of this fact, in most cases, the environment continues to be addressed as a separate component without clear linkages to the social and economic aspects.

In 2011, the United Nations Environment Program - UNEP - has developed a working definition of a green economy as one that results in **improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities**. In its simplest expression, a green economy can be thought of as one which is **low carbon, resource efficient and socially inclusive**. [1]

In September 2015, the **UN General Assembly** formally established 17 **Sustainable Development Goals (SDGs)** to be addressed by 2030, thus providing a common framework for public and private stakeholders to set their agendas and define their policies and strategies over the next 15 years (See Exhibit). [2] The General Assembly also adopted the UNEP strategic paper on “**An inclusive green economy: a summary for leaders**” in which concepts such as “sharing, circularity, collaboration, solidarity, resilience, opportunity, and interdependence” pointed out. [3]

**An Inclusive Green Economy** is an alternative to today's dominant economic model, which generates widespread environmental and health risks, encourages wasteful consumption and production, drives ecological and resource scarcities and results in inequality. It is an opportunity to advance both sustainability and social equity as functions of a stable and prosperous financial system within the contours of a finite and fragile planet. It is a pathway towards achieving the 2030 Agenda for Sustainable Development, eradicating poverty while safeguarding the ecological thresholds, which underpin human health, well-being and development.

Critically, the concept of the green economy is not just “greening” economic sectors; it is a means of achieving the sustainable development in the following important areas:

- Improving human well-being: securing better healthcare, faith against the new infectious diseases, like HIV, Ebola virus disease and Zika virus -, preventive drugs measures, improving the education and safeguarding the job security;
- Increasing social equity: launching poverty alleviation programs and ensuring social, economic and financial inclusion;
- Reducing environmental risks: addressing climate change, managing deforestation and desertification, melting of the North Pole and Antarctic, the release of hazardous chemicals and pollutants, and excessive or mismanaged waste; and
- Reducing ecological scarcities: securing access to freshwater, natural resources and improving soil fertility.

Eric Usher, Head of the UN Environment Finance Initiative estimated, the for achieving the SDGs - the global action plan to end poverty, combat climate change and protect the environment - USD5 to 7 trillion needed through 2030. On 30 January 2017, nearly 20 leading banks, financial institutions and investors in Paris set standards sets USD6.6 trillion in assets as the Principles for Positive Impact Finance for sustainable investments.

**What is Eco-Innovation?**

Any form of innovation aiming at significant and demonstrable progress towards the goal of sustainable development. This can be achieved either by reducing the environmental impact or achieving a more efficient and responsible use of resources. [5]
IN CONNECTION WITH THE GREEN ECONOMY THE OTHER IMPORTANT ISSUE IS THE ECO-INNOVATION.

“Eco-innovation is any innovation that reduces the use of natural resources and decreases the release of harmful substances across the whole life-cycle.” [6]

Eco-innovation projects will therefore aim to produce quality products with less environmental impact, whilst innovation can also include moving towards more environmentally friendly production processes and services. Ultimately they will contribute towards the reduction of greenhouse gases or the more efficient use of various resources. The idea of eco-innovation is very new.

In 2013, the European Commission DG Environment founded a project aiming to compile the Eco-Innovation Observatory (EIO). The EIO put together a guide is a practical and comprehensive introduction to eco-innovation addressed primarily to small and medium-sized enterprises (SMEs). [7] The booklet overviews emerging business opportunities eco-innovation has to offer to companies that reconsider business models, develop new products, technologies or services, or improve production processes.

As an eco-innovation we can consider a new start-up or product or making improvements in existing operations. Eco-innovation can focus on introduction of new technologies, but reating new services and introducing organisational changes are just as important. At its core, eco-innovation is about creating business models that are both competitive and respect the environment by reducing resource intensity of products and services.

The Figure 1. demonstrates the reasons why do eco-innovation.

Figure 1.

- Saving material and energy costs
- New products and services: new markets
- New business models

- Sustainable management of natural resources
- Tackling climate change
- Improving biodiversity and ecosystems

- Enhancing quality of life
- Creating new and sustainable jobs

- Material security
- Resources justice

Source: EIO 2013.

Circular Economy

What is the circular economy? A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible. The EU adopted the circular economy package on 2 December 2015. The Action Plan for the circular economy suggested action actions will contribute to “closing the loop” of product lifecycles through greater recycling and re-use, and bring benefits for both the environment and the economy. [8]
The adaptation of the circular economy offers considerable economic benefit. In 2017, the UK Waste and Resources Action Programme – WRAP – estimates that the UK businesses could benefit GBP 23 billion per year by low cost and improvement in efficient use of resources. McKinsey Global Institute estimates that total resource productivity opportunity could amount annual saving to society of USD2.9 trillion a year in 2030, at current market prices. [9]

To showcase the key deliverables achieved so far and to debate future deliverables with stakeholders, the Commission and the European Economic and Social Committee on 9-10 March 2017 organised a Circular Economy Conference. On this occasion the European Circular Economy Stakeholder Platform was announced.

2. THE ROLE OF SMEs IN GREENING THE ECONOMY

In 2014, within the EU-28, 26 million active enterprises existed with some 143 million persons employed. There were about 4 million jobs created from 2.6 million newly born enterprises, while in the same year the results show 3.5 job losses as a consequence of 2.3 million death businesses. 75.5% of all active businesses were in the service sector. By contrast, only 9.9% of active enterprises were found in industry, even though these enterprises provided work for 23.6% of the total number of persons employed. [10] SMEs account for more than 98% of Europe’s businesses and provide more than 67% of total employment in the Union and 58% of gross value added.

In spite of no internationally agreed definition of green growth, there is consensus that it is a combination of economic growth and environmental sustainability. Improving the skills and training is a key challenge for SMEs, especially with regard to innovation and resource efficiency. However, inadequate access to risk capital, in particular at the start-up stages, continues to be one of the main obstacles to the creation and development of growth-oriented businesses;

The individual environmental footprint of the small enterprises may be low, their aggregate impact can, in some respects, exceed that of large businesses. The key sectors where SMEs have a significant environment impact include livestock farming, construction, metal finishing, waste treatment, food and drink industry, textile and leather manufacturing, etc.

SMEs account approximately for 64% of the industrial pollution in Europe. Sector variations are generally within the 60% to 70% range. Using employees as an indicator shows at an average of 64% of environmental impact originates from SMEs in the EU27 when looking at the four broad indicators (energy use; greenhouse gases; air emissions and waste or hazardous waste). [11]

The transition towards the green growth economy is highly demanding in particular on manufacturing firms, including SMEs, as they account for a large part of the world’s consumption of resources and generation of waste. SMEs in general do not perceive their own environmental impact as compared to large enterprises. SMEs lack information, resources, technical knowledges and expertise to implement green initiatives. The environmental commitments are mostly depend on the SME owners.

It is essential to identify the main barriers to green growth and eco-innovation, so based on these factors SMEs and entrepreneurs could fully participate in the transition towards sustainable economic patterns. It is also crucial that consistent policy strategies are identified and implemented to encourage SME investment in eco-innovation and sustainable practices, in both manufacturing and services.

At time being there are no many researches on SMEs’ main barriers for environmental awareness. As one of the best summaries see below by the European commission.

The aim and key success factor in greening economy for SMEs to the reduction of the environmental in both manufacturing as well as in. However, the willingness and capability of SMEs to adopt sustainable practices and seize green business opportunities generally face difficulties and resource constraints, which involved skill deficit and knowledge limitations. SMEs are often unaware of many financially attractive opportunities for environmental improvement. There is a widespread misperception that protecting the environment is associated with technical complexity, burdens and costs. Even when they are aware of the
potential of better environmental performance to improve a firm’s competitiveness, a lack of appropriate skills and expertise commonly prevents firms from acting upon win-win opportunities.

According to OECD guide for green SMEs the “green transformation” is a significant business opportunity for SMEs themselves as important suppliers of goods and services. Indeed, the principal drivers for SMEs to adopt green practices are non-regulatory and include: [12]

- The rising price of commodities and key raw materials;
- Potential cost savings and competitive advantage; and
- Market pressure from customers

The European Union considers the small businesses as priority in its policy and pushes governments across the EU introduce better regulation initiatives. The major policy initiatives for SME greening in the EU is The Small Business Act for Europe (2008), which was developed to establish the “Think Small First” approach to policy making and regulation and to promote SMEs’ growth. One of its ten high-profile principles is “enable SMEs to turn environmental challenges into opportunities” – a paradigm which lies at the heart of the transition to green growth.

**Figure 2. Internal Barriers in SMEs that prevent the adoption of environmental improvement**

<table>
<thead>
<tr>
<th>Resources</th>
<th>Attitudes and company culture</th>
<th>Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lack of time to investigate issues or locate support or tools;</td>
<td>• Believes that SMEs have a low environmental impact and have no environmental issues to consider;</td>
<td>• Low awareness of environmental legislation;</td>
</tr>
<tr>
<td>• Severe time pressure in small enterprises;</td>
<td>• Mismatch between beliefs and action: positive attitude toward the environment is not translated into actions;</td>
<td>• Low awareness of support organizations and information sources.</td>
</tr>
<tr>
<td>• Lack of resource allocation to address environmental issues;</td>
<td>• Perception that environment has no relevance to the business environment given no status as a business issue;</td>
<td></td>
</tr>
<tr>
<td>• Lack of investment in training;</td>
<td>• Scepticism about the potential cost saving and market benefits;</td>
<td></td>
</tr>
<tr>
<td>• Cost constrains on investment;</td>
<td>• Prevalence on short-term business planning: beliefs that costs of environment measures arise quickly while benefits accrue slowly.</td>
<td></td>
</tr>
<tr>
<td>• No employee allocated responsibility for environmental issues.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: European Commission, 2002*

3. **EU GREEN ACTION PLAN - GAP**

The European Commission has committed itself to “rigorously assessing the impact of forthcoming legislation and administrative initiatives on SMEs (“SME test”) and taking relevant results into account when designing proposals”. The European Commission has recently prepared a **Green Action Plan (GAP)** for SMEs, which give a clear direction and framework for aims to:

- Improve resource efficiency of European SMEs;
• Support green entrepreneurship;
• Exploit the opportunities of greener value (supply) chains; and
• Facilitate market access for green SMEs. Source: EC, 2008; EC, 2014b

GAP is presented in complementarity with the Communication Green Employment Initiative. – Tapping into the job creation potential of the green economy, which proposes a roadmap for supporting green jobs creation across the EU, and with the Communication Resource Efficiency Opportunities in the Building Sector as well as with the Circular Economy Package and Waste Target Review.

The GAP aims to contribute to the re-industrialisation of Europe as advocated by the European Industrial Renaissance Communication (COM (2014) 14) and supported by the European Council, by enhancing SMEs competitiveness and supporting green business developments across all European regions, notably in view of the fact that, at this stage, significant differences in resource efficiency exist between sectors and Member States.

The European Commission document on Communication from the Commission to the European Parliament, the Council, the Europea Economic and Social Committee and the Committee of the Regions on the Green Action Plan for SMEs highlights why greening SMEs important for more competitiveness and sustainability. [13]

The Commission has set several objectives to be achieved through the following actions:

1. Provide European SMEs with practical information, advice and support on how to improve their resource efficiency in a cost-effective manner;
2. Support efficient technology transfer mechanism for green technologies;
3. Facilitate the access to finance for resource-related improvements and energy efficiency in SMEs

The GAP aims to contribute to the re-industrialisation of Europe as advocated by the European Industrial Renaissance Communication (COM (2014) 14) and supported by the European Council, by enhancing SMEs competitiveness and supporting green business developments across all European regions.

The Action Plan builds on the Eco-Innovation Action Plan (EcoAP) [14] which provides directions for eco-innovation policy and funding under the umbrella of the Europe 2020 strategy. A number of actions and instruments of the EcoAP are highly relevant for SMEs. Examples are

• the European Innovation Scoreboard
• the Eco-innovation Observatory
• the European Forum on Eco-innovation
• European Innovation Partnerships and financing instruments for eco-innovation under Horizon 2020.

The GAP sets out a series of objectives and lists actions that will be implemented at European level within the framework of the Multiannual Financial Framework 2014-2020.
THE FIVE MAJOR TASKS OF THE GAP ARE THE FOLLOWING:

3.1 Greening smes for more competitiveness and sustainability

Improving resource efficiency in SMEs offers enormous potential for the reduction of production costs and for productivity gains. A better use of resources is calculated to represent an overall savings potential of €630 billion per year for European industry. [15]

At least 93% of SMEs in the EU are taking at least one action to be more resource efficient which, in most cases, is a low-cost action. However, only 42% of SMEs that implement measures to improve resource efficiency has seen a reduction of their production costs. This indicates the necessity to provide guidance to SMEs on the cost-effectiveness of resource efficiency investments.

The Commission has set several objectives to be achieved through the following actions:

- Provide European SMEs with practical information, advice and support on how to improve their resource efficiently in a cost-effective manner;
- Support efficient technology transfer mechanism for green technologies;
- Facilitate the access to finance for resource-related improvements and energy efficiency in SMEs

The Commission has set several objectives to be achieved through the following actions:

- Provide European SMEs with practical information, advice and support on how to improve their resource efficiently in a cost-effective manner;
- Support efficient technology transfer mechanism for green technologies;
- Facilitate the access to finance for resource-related improvements and energy efficiency in SMEs

3.2 Green entrepreneurship for the companies of the future

SMEs need a favourable business environment, in which green ideas can be easily developed, financed and brought to the market. “Green entrepreneurship” should already be addressed in (higher) education, to prepare the mind-set of future green entrepreneurs. [16] Green entrepreneurship should also be encouraged by helping potential entrepreneurs in identifying business opportunities resulting from the move towards a resource efficient, low carbon economy, including through new creative forms of cooperation between businesses and academia. All forms of innovation that foster green entrepreneurship should be supported.

The Commission has set several objectives to be achieved through the following actions:

- Promote all forms of eco-innovation, including non-technical eco-innovation;
- Facilitate business partnership, skills and knowledge for green entrepreneurship;
- Exploit better role of clusters in support of eco-innovative SMEs.

3.3 Opportunities for SMEs in a greener value chain

Re-manufacturing, repair, maintenance, recycling and eco-design have a great potential to become drivers of economic growth and job creation while, at the same time, making a contribution to addressing environmental challenges. Through innovation and the redesign of products and of production and business models companies can reduce the use of expensive primary raw materials and create less waste. The 60% of total waste in the EU which is not recycled, composted or re-used, offers economic opportunities for SMEs to capitalise on cross-sectoral value chains that make more efficient use of resources. [17]
The Commission has set several objectives to be achieved through the following actions:

- Address systemic barriers to cross-sectoral and cross-national value chain collaboration and business creation and cooperation, by facilitating the creation of service business models and the re-use of materials, products and waste;
- Facilitate cross-sectoral collaboration in view of promoting the circular economy;
- The forthcoming action on 'Cluster facilitated projects for new industrial value chains' under Horizon 2020 will allocate at least 75% of the total budget to support innovation in SMEs. It seeks to support cross-sectoral and cross-regional collaboration and innovation projects driven by SMEs by better integrating them into clusters and different value chains

3.4 Access to the markets for green SMEs

The EU has a strategic interest to adequately tackle the major global environmental challenges such as climate change. With high economic growth and, in some cases, early stages of industrialisation, environmental depletion and emissions are growing at a high pace in many countries of the world.

The EU makes up roughly one third of the world market for environmental industries and is a net exporter. This world market is growing by 5% a year and is expected to triple by 2030, thus offering important opportunities for EU businesses. [18] However, few SMEs in the EU offer their green technologies, products or services in countries outside the EU. 87% of SMEs in the EU only sell in their national markets. [19] This lack of SME internationalisation is usually explained by the absence of a supportive framework that can help SMEs access foreign markets.

3.5 Governance

The actions linked to this Green Action Plan for SMEs will be regularly monitored, including the dedicated financial resources, in dialogue with SME stakeholders, and the effectiveness of the programmes will also be evaluated. Updated information on the actions will be provided through the Commission website.

The SME Performance Review monitors and assesses countries' progress in implementing the Small Business Act on an annual basis, including their performance in relation to its principle 9 'enabling SMEs to turn environmental challenges into business opportunities', thereby complementing the Green Action Plan monitoring. [20]

4. GREEN ENTREPRENEURSHIP AWARD

4.1 European Entrepreneurship Promotion Awards

The European Enterprise Promotion Awards reward those who promote entrepreneurship and small business at the national, regional and local level. Initiatives from all EU countries, as well as Iceland, Serbia, and Turkey can take part in the competition. Since 2006, over 2,800 projects have entered the awards and together they have supported the creation of thousands of new companies. [21]

The competition has two stages. Applicants must first compete at national level to be eligible to compete at European level. For the national competition, each country will select two entries to be nominated for the European competition. A shortlist of nominees will be chosen by a European jury. All nominees from the national and European competitions will be invited to attend the awards ceremony.

In 2016, the winner of the category for support SME success to green markets was the Serbian “Lime Trees & Honey Bees for Sustainable Development of the Danube Micro-region” project strengthens the competitiveness of beekeeping in the Fruška Gora region and motivates young people to start beekeeping businesses. The project aims to increase the market share of Fruška Gora lime honey by investing in human resources and skills development, improved knowledge through scientific research, education and
the introduction of new technologies. This project was founded by the European Union and the Austrian Development Agency. The project duration was 18 months. The project value was €222,658, out of which €171,915 was the grant amount.


4.2 Green Grog Award - GFA

The Deloitte Central European Sustainability Report Award – the Green Frog Award - is an award for best sustainability reports. The contest aims to identify and reward excellence in corporate non-financial reporting in Central Europe. [22]

The Green Frog Award (GFA) was launched in 2000 in Hungary and step by step embraced by other CE countries (Balkans joined in 2009, Czech Republic in 2012, and Baltics in 2013). From 2015, the GFA consists of a national and regional level. Reports rewarded at the national level will be automatically nominated to the Central European level.

Reports will be assessed according to these criteria:

1. Sustainability performance & strategic commitments
2. Materiality
3. Content
4. Structure and creativity in communication (getting the message across)
5. Impact measurement
6. Financial and non-financial data integration

The winner of the 2015 Sustainable Development Report was the Czech Plzeňský Prazdroj, a. s.

4.3 Green Economic Platform for SMEs - GreenEcoNet

The GreenEcoNet is the first global platform to support SMEs in the transition to a Green Economy, by providing:

- Access to the best in class green solutions, products and services;
- Access to the economic, financial and planning tools to transform their business into a green business;
- Access to new market opportunities by showcasing solutions, products and services;
- A space to have dialogue with policy makers and the research community involved in the green economy. [23]

GreenEcoNet is coordinated by a consortium of six leading research networks specialising in green economy transitions including the Stockholm Environment Institute (SEI), the Green Economy Coalition (GEC), the Dutch Joint Implement Network Climate and Sustainability, the Brussels based Centre for European Policy Studies (CEPS), Ecologic Institute and the University of Piraeus Research Centre (UPRC). The GreenEcoNet was funded by the European Commission through the Framework Programme 7 and its aim is to accelerate the uptake of green business practices across Europe.

4.4 European business awards for the environment

A growing number of businesses realise that protecting the environment is vital in maintaining Europe’s competitiveness. The European Business Awards for the Environment (EBAE) recognises these
pioneers, celebrating those companies at the forefront of eco-innovation, or which have a respect for the environment at the very core of their business principles. [24]

The awards are held every second year (the next cycle is 2016-2017), and winners are recognised in the following four categories: management, product and services, process innovation, and international business cooperation, with a special mention for business and biodiversity.

CONCLUSION

The European Commission, EU Member States and non-member countries, their Governments, the business community and the civil society have to search for new directions and embrace an economic model which is as low-carbon user-friendly and environmentally sustainable. In addition this model also fight against the poverty and inequality, while explores new market opportunities not only for smart and progressive, but also for average SMEs.

Solutions are urgently needed. We do not have too much time. Business as usual is not an option: choosing to “kick the can down the road” over the next few years will bring unacceptable environmental and social strains  accelerating the natural disasters by climate disasters, foreshadowing the danger of a possible world war for drinking water and generating the African and Asian mass-migration.

EXHIBIT

The Global Goals for Sustainable Development


LITERATURE


THE ECONOMIC RECOVERY, INCLUDING SMES SECTOR, IS SECURED

ABSTRACT

During the period 2009-2014 Serbia faced zero rate of growth. In the last two years it put the main economic problems, namely: the budget deficit, public debt and international debt, under control. At the same time international and domestic demand somewhat increased while inflation rate stayed at low rate and as a result it seems that economic recovery is now secured. Above all market reforms in some important areas got momentum. The reaction of small and medium scale enterprises and shops was positive and again more entrepreneurs started their business than quit.

The aim of the paper is twofold: firstly, to illuminate what are the main reasons for overall positive economic trends especially in SMEE sector and secondly, to elaborate why is important now to introduce measures in order to improve competitiveness of Serbian SMEs and how to do so.

Keywords: SMEE, market reform, recovery, support

JEL Code: L26, M13, M38

1. INTRODUCTION

Prior to the crisis, which negatively affected Serbian economy at the end of 2008 and the beginning of 2009, SME sector experienced fast development and became important economic subject. It created 40% of total GDP, employed almost 2/3 of total employment and contributed with ½ into total export. This encouraging outcome was result of improved overall economic climate due to market reforms and supportive measures for SMEs strengthening.

During the crisis small and medium scale companies and shops (SMEs) were affected more than large companies, because government support weaken, market reforms lost momentum, access to finance became more difficult and domestic and foreign demand shranked. It seems that 2011 was the worst, when for the first time during the transition period more SMEs and shops were closed than new established.

During 2015 and 2016 there are signs that economic recovery is secured, including SMEs. The main economic problems: unemployment, public debt and external debt still exist, but are put under control. Low inflation and stable FX rate make business condition predictable. Domestic demand and somewhat external demand are increasing. Balance of payment and FDI are improving. Market reforms in some important areas took place.

In spite of possible risks for growth, related to recovery in EU, public deficit and public and external debt, SMEs development in near future, is secured.

2. THE LIGHT AT THE END OF THE TUNNEL – SMES RECOVERY IS SECURED
The main problems which Serbian economy is facing with are: public debt and public deficit, external debt and high unemployment. During 2015 and 2016 those problems are put under control, and progress is more encouraging than projected.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (% p.a.)</td>
<td>-3.1</td>
<td>0.6</td>
<td>1.4</td>
<td>-1.0</td>
<td>2.6</td>
<td>-1.8</td>
<td>0.7</td>
<td>2.7</td>
</tr>
<tr>
<td>GDP € bill</td>
<td>30.7</td>
<td>29.8</td>
<td>33.4</td>
<td>31.7</td>
<td>34.3</td>
<td>33.3</td>
<td>32.9</td>
<td>33.8</td>
</tr>
<tr>
<td>GDP p.c. €</td>
<td>4,187</td>
<td>4,082</td>
<td>4,619</td>
<td>4,400</td>
<td>4,781</td>
<td>4,672</td>
<td>4,626</td>
<td>4,750</td>
</tr>
<tr>
<td>Inflation (% p.a.)</td>
<td>6.6</td>
<td>10.3</td>
<td>7.0</td>
<td>12.2</td>
<td>2.2</td>
<td>1.7</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Current Account Deficit %GDP</td>
<td>-6.6</td>
<td>-6.8</td>
<td>-10.9</td>
<td>-11.6</td>
<td>-6.1</td>
<td>-6.0</td>
<td>-4.8</td>
<td>-4.0</td>
</tr>
<tr>
<td>Budget Deficit %GDP</td>
<td>-4.4</td>
<td>-4.6</td>
<td>-4.8</td>
<td>-6.8</td>
<td>-5.5</td>
<td>-6.6</td>
<td>-3.7</td>
<td>-1.7</td>
</tr>
<tr>
<td>Public Debt %GDP</td>
<td>32.8</td>
<td>41.8</td>
<td>45.4</td>
<td>56.2</td>
<td>59.6</td>
<td>70.4</td>
<td>74.7</td>
<td>72.9</td>
</tr>
<tr>
<td>External Debt %GDP</td>
<td>72.7</td>
<td>79.0</td>
<td>72.2</td>
<td>80.9</td>
<td>75.1</td>
<td>77.1</td>
<td>80.1</td>
<td>76</td>
</tr>
</tbody>
</table>

**Table 1: Serbia – main economic figures 2009 – 2016**

Source: [1]

At the end of third quart of 2016 external debt amounted 25.7 billion which was 0.5 billion less than at the end of 2015, due to repayment which was made by government mainly (374 million while private debtors repaid 134 million). At the same time the share of external debt in GDP was 76%, which is encouraging improvement in comparison to its maximum (81% at the end of 2013)[1]. In 2016 Budget deficit was 1.7% of GDP (while was 6.6 and 3.7% of GDP in 2015 and 2014, respectively). Total public debt (internal and external) was € 24.8 billion, or 72.9% of GDP (while was 75% at the end of 2015) [1]. Total employment increased 3% in 2016, mainly in private sector (5.3 % increase). At the same time unemployment is still serious problem, especially among young generations, but with decreasing trend (13.8% in the third quart of 2016) [1].

Inflation rate after years became comparable to EU level. Inflation rate was 1.6% in 2016 (1.5 % in 2015 and 1.7% in 2014). Moreover it was less than the lower limit targeted by National Bank of Serbia, as target was 4± 2%, so it was corrected down to 3± 1.5%. Low inflation rate was result of low inflation pressure related to internal and external factors as well, namely oil prices, prices of agricultural products, low domestic and EU demand. Central Bank (NBS) additionally decided to put interest rate (referent interest rate is interest rate on state bonds repurchased in one week) down to 4%, as a part of monetary relaxation from May 2013 in which interest rate decreased by 7.75 pp [2]. FX rate of Dinar was stable as it depreciated 3.5% in the last four years, which was outcome of low inflation rate, high volume of FDI (€ 1.6 billion in 2016 and € 1.8 billion in 2015), stand - by arrangement with IMF, improved risk position of Serbia VS foreign creditors and more than enough FX reserves of NBS for intervention on FX market (amounted 10.2 billion € at the end of 2016 [2].

During the period 2009-2014 Serbia was faced with zero rate of GDP growth. Economic activity is now 2.4 % higher in comparison to pre - crisis period. In 2016 growth of economic activity was 2.7 % due to increase in industrial production (increase 4.7%), services (volume of retail trade increased 7.5% and tourism 13%), investment activities and export [1]. Projection of growth of GDP in 2016 was corrected upward, because of increase in economic activities and Balance of Payment improvement. In 2016 export volume was higher for 11.5 % and import 6.1 %, with increasing cover of value of import by export (77%). Trade balance was at the same time 4% of GDP and completely was covered by inflow of FDI.

Market reforms got momentum in recent period, especially in some important and sensitive areas. Namely, getting of construction permit is now improved, necessary time to get it is 30 days and procedure is in e-form. In the past it was one of the main obstacles in business, with time frame of more than one year.
The Labor legal framework became more flexible, with more precise evidence of (un)employment and more powerful labor inspection. The Fiscal restructuring for the first time became strict and, although very painful, succeed to stop increase of public debt [3].

In spite of bright signs that economic recovery is secured and economic trends better than projected, there are some risks for growth in the next period. GDP increase in 2017 is projected to 3% [2]. Serbian main trade partners are from EU countries, former Social Federal Republics of Yugoslavia and Russia. Euro zone is facing with difficulties, like Brexit is (pool decision of Britain to leave EU). EU GDP growth for 2017 is projected to 1.7 %, mainly due to policy of monetary easing of European central Bank (ECB) from the 2015. The risks for projection of growth are also related to the prices of oil on the global market (somewhat stabilized due to OPEC agreement of volume of production) and to different monetary policies of central banks (contrary to ECB, FED for the second time increased its interest rates, after six years of stable almost zero rates). The main test for successful Serbian recovery is related to domestic factors: readiness for fiscal restructuring, as Serbian public deficit is higher than EU average (3.8 and 1.4% of GDP in 2015 and 2016) and public debt also (75% and 73% of GDP in 2015 and 2016).

3. THE DEVELOPMENT HINDRANCES AND LOW COMPETITIVENESS OF SMES

Serbia has started process of transition as the last among countries of Eastern and Central Europe. The development of SMEs sector was very fast in the period 2001-2008 due to the market reforms and encouraging business environment combined with government support. The goal was to establish as much as possible new business unites, namely SMEs, and the goal was achieved, as maximum was 13 thousands of new SMEs per year. As a result SMEs sector became important economic agent. According to number SME amounted 99.8% of total economic entities, their contribution to total employment was 2/3 and 1/3 to GDP formation. Their share was 64% in total turnover and 56% in total Gross Value Added (GVA) [4] and [5].

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEE Number 000</td>
<td>303.4</td>
<td>314.8</td>
<td>318.5</td>
<td>319.3</td>
<td>317.1</td>
<td>315.4</td>
<td>324.2</td>
<td>324.6</td>
</tr>
<tr>
<td>SMEE Employees 000</td>
<td>940</td>
<td>873</td>
<td>815</td>
<td>787</td>
<td>782</td>
<td>769</td>
<td>762</td>
<td>802</td>
</tr>
<tr>
<td>SME GVA million €</td>
<td>10,289</td>
<td>8,282</td>
<td>7,933</td>
<td>8,614</td>
<td>8,637</td>
<td>8,521</td>
<td>8,777</td>
<td>9,084</td>
</tr>
</tbody>
</table>

Table 2: Serbia – SMEE, main figures

Source: [4]

The Overall economic crisis negatively affected Serbian economy from the end of 2008 and at the beginning of 2009. SMEs were affected especially because of decreasing domestic and external demand, worsening business environment, lesser support from government and difficult access to financials [6]. At the beginning of the crisis SMEs were resistant to cut number of employees, but with weaker economic performances they had to do so. Micro and small companies were severely affected because of lack of financial assistance from banking sector. In spite of difficulties among SMEs only fast growing companies and gazelles continued to grow [5].

Good insight into business environment, business chances and job creation one can get from business demography. From 2008 on one can recognize two opposite trends: number of newly established companies and shops is decreasing, while at the same time number of those companies and shops which terminate their activities is increasing. It seems that 2011 was the worst, when for the first time during the transition period net effect was negative (number of closed was higher than number of new established) [7]. One can recognize that during the last two years (2015 and 2016) there were some positive signals regarding business demography, as result of somewhat improved conditions for business.
Overall business environment is improving step by step during the recent period, which is important for those potential entrepreneurs with idea to start up business. It can be seen from global investigation on Global Entrepreneurship Index (GEI) [8] calculated for each country as indicator of quality of entrepreneurship, individually and institutionally, especially for innovation and effect of entrepreneurship [9]. Serbian GEI value is 23.1, ranked as the 72nd, which is two places better than the year earlier. Comparing to other countries within the Region of South East Europe Serbia is behind Montenegro and in front of FIROM. According to the investigation Serbia has comparative advantages related to better knowledge of entrepreneurs - beginners, linkages between entities and implementation of innovation and new technologies. Its drawbacks are: fewer chances to start business, low share of SMEs in medium and high tech sectors, low quality of human sources, scarce venture capital and low level of internationalization of SMEs [9].

Chart 2: Global Entrepreneurship Index Source: [9]
According to Doing Business Report 2017 Serbia belongs to top ten countries in market reforms [10]. It was ranked as the 47th while the year earlier was ranked as the 54th. The improved (e-form) and shorten procedure for construction permit was accessed as the main step forward (according to this Serbia improved its position from the 152nd to the 36th). The land registry was improved (Serbia moved from the 72nd to the 56th position) and business registry, as well (Serbia moved from the 62nd to the 42nd position). However, at the same time the Report labeled the legal environment and administrative procedures as bottlenecks (a contractual execution and electricity acces) [10].

In order to speed up and secure economic recovery the analysis of the main development hindrances was made [11]. In spite of improving business environment step by step and speeding up market reforms strong development hindrances still exist. The assumption is that sustainable growth and development are driven by private investments. So, the point is to find out what is constraining domestic private investment in Serbia. Firstly, administrative and regulatory burden toward private business are strong. Secondly, regulatory uncertainty is also important issue. Thirdly, information externalities prevent economic diversification and strengthening competitiveness. Fourthly, Access to finance is weak, especially for SMEs and start ups. Fifthly, human capital is constraints for knowledge intensive industries[10].

<table>
<thead>
<tr>
<th>Considerable improvement</th>
<th>Improvement</th>
<th>No Improvement</th>
<th>Worsening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax and related duties on wages</td>
<td>Court procedure</td>
<td>GVA rate</td>
<td>External financing</td>
</tr>
<tr>
<td>Construction permit</td>
<td>Para-fiscal duties</td>
<td>Custom duties</td>
<td>Banks' loans</td>
</tr>
<tr>
<td>Permit to start business</td>
<td>Admin procedures</td>
<td>Credit issuing timing</td>
<td>Banks servicing</td>
</tr>
<tr>
<td>Inspection control</td>
<td>Custom procedures</td>
<td>Bank reporting</td>
<td>Excise</td>
</tr>
<tr>
<td>Court execution process</td>
<td>Payment</td>
<td>Fiscal admin</td>
<td>Real estate prices</td>
</tr>
<tr>
<td>GVA payment</td>
<td>Public procurements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corruption</td>
<td>Interest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>Credit issuing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FX rate</td>
<td>Collateral</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informal economy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reform publicity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 2: Serbia - Improvement of business environment 2011-2015**  Source: [12]

To check weather business environment is really improved, in which areas and how much, the best way is to ask entrepreneurs. It was done during September and October 2015 with thousand companies and shops [12].The survey included questions related to business results in the past and projections for near future, with important part related to market reforms realized in meantime. The main finding is that business environment is improved in some areas very much, in some areas improvements were modest, but in some areas there were backward steps.
According to Serbian businessman encouraging improvement were made in construction permit procedure, executive procedure efficiency and procedure to establish business (28%, 55% and 25% negative answers in 2015 respectively, while 43%, 66%, and 35% were negative in 2014). Considering the entire period 2010-2015 encouraging improvements were made in areas as follows: construction permit, business establishment, fiscal and other duties on wages, inspection control, court executive procedure, GVA payment, corruption dismantling, FX and price stabilization. At the same time modest improvements were made in: level of fiscal and related duties, court, custody and admin procedure, labor legal frame, procedure and duties related to crediting. No improvement was pointed in: GVA and Custom duties level, fiscal administration and credit procedure. At the same time backward steps were made in some areas: excise, price of real-estates and access to finances. As can be seen, businessman optimism was increased, as result of reforms, which speed up in the recent period. According to the investigation more entrepreneurs than before expect increase in profit (44% in 2015, and 34% in 2012), and increase in employment also (24% in 2015 and 19% in 2012) [12].

4. GOVERNMENT SME SUPPORTIVE MEASURES NEED TIME FOR FULL EFFECTS

Serbia has started process of transition after political changes in October 2000. Considering low statistical basis, because of deep economic and overall crisis during 1990s, market reforms and economic growth were very fast in the period 2001 – 2008 (GDP increase was 5.4% per year on average). During this period necessary institutional and legal framework for SME support were established, access to finance was easy and cheap, business environment was generally improving [6]. SME growth and development was fast considering number of entities and their increasing share in economic figures. It was fast enough partially to absorb increasing unemployment related to those workers who lost their job during restructuring of companies.

Regarding the government SME support policy and measures one can clearly separate two - sub period during transition process (2001-2016). The first phase was period until 2008 and the start of economic crisis, in which good record of SME growth and development was made, during which SME sector became important economic agent. In this period government support was of quantitative character, with a goal to establish as much as possible new entities (companies ad shops as well) each year. The second phase was more difficult one, because of deteriorated overall economic environment related to the global crisis. During this period it became clear that Serbia has to change development approach (strategy) toward international market, with competitiveness strengthening and efficiency improvement. It means at the same time that goal became microeconomic, e.g. related to company (shops) level. So, government SME support policy ought to
be rather qualitative, to strengthen innovations and technology, to improve productivity and internationalization of SMEs [13].

The main findings of SME Policy index, which is measuring achievement in several dimensions related to Small Business Act, is that general business environment is improving, especially in recent years, but some important questions ask for engagement, like access to finance and green economy [6].

<table>
<thead>
<tr>
<th>Strong progress</th>
<th>Need improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>Mark</td>
</tr>
<tr>
<td>7. Technical regulation</td>
<td>4.01</td>
</tr>
<tr>
<td>3. Regulatory framework</td>
<td>4.15</td>
</tr>
<tr>
<td>5. Public procurement</td>
<td>3.96</td>
</tr>
</tbody>
</table>

Table 3: Progress made and challenges – SBA dimensions

Source: [6].

It was already mentioned that the finding is that the state is large and costly, while private sector is non-competitive [14]. Considering that after a few lost years when market reform were diminished, the market reform got momentum, it is necessary to continue with the reforming process, especially in areas accessed as key bottle-necks, which stopping or slowing growth and development. As the economic growth has to be export led, the reforms would address constraints to investments in the tradable sectors and exports, access to finance for SME and start-ups, human capital for knowledge intensive industries and administrative and regulatory burden and uncertainty [17].

As fiscal deficit and public debt are the main macroeconomic problems it is necessary to continue with the fiscal consolidation. Public companies are at the very beginning of their restructuring, which have to speed up. Few dozens of still socially owned large companies also have to be restructured and sold (or closed) if one wants to cut government subsidies. In order to improve business environment further the legal framework have to be simplified and investments support system improved. For the research and innovation important, for supporting business innovation and addressing information externalities, is to adopt a new strategic and legal framework. A part of broaden reform should be improving the efficiency of managing educational system.

5. CONCLUSION

SME sector in Serbia became an important economic agent during the period of fast growth and development between 2001-2008, in which Government support was of quantitative character, with idea to establish as much as possible new economic subjects each year. However, one can see that a critical number of SMEs was not reached, so development of the entrepreneurial sector was not self sustained.

Serbian economy was hampered by global crisis and zero rate of growth of GDP was evidenced in the period 2009-2014. SMEs were severely affected as domestic and foreign demand weakened, government support also and market reforms lost momentum. Only a teeny segment of fast growing SME and gazelles continued to grow.

During the recent period market reforms fastened, in some important areas were made brake through. More important, domestic and foreign demand recovered and Government put the main macro problems, like public deficit and debt under control successfully. As a result inflation rate is, for the first time, comparable to EU level and FX rate is stable. Now, Serbian development strategy has to be changed toward export oriented one. It means that government support for SME ought to be of qualitative sort and micro oriented, with idea to strengthen competitiveness, innovations and internationalization of SME.
LITERATURE:


STRENGTHENING THE RESILIENCE OF SMALL AND MEDIUM-SIZED ENTERPRISES

ABSTRACT

In the global world, we live in, business environment is interdependent and increasingly diverse speaking of culture. Therefore, operational risks exceed local and regional limits, which results in the risk which is shared by companies in global environment. However, not only can resilience be observed from the aspect of community, but also from the aspect of organization. In this study, authors research only organizational aspects of resilience. The goal of these researches is to indicate the significance of the need for improving resilience and determining possibilities for its achievement. Qualitative methods, as well as the extensive literature being a theoretical research frame have been used for this purpose.

Key words: organizational resilience, theory of resilience, building resilience

JEL: M14

1. INTRODUCTION

Small and medium-sized enterprises create new jobs and contribute to economic development of each country. In globalization, enterprises are exposed to global economic “shocks”, which are unpredictable by nature and which affect their profitability. In order to be resilient, organizations should lean to strong leadership, comprehension of work environment and the ability to adapt and respond to fast changes. However, are they resilient enough to cope with operating in a risky and unpredictable business environment? We have tried to get the answer to this question as well as to determine possibilities for improvement of resilience of enterprises in this research. In other words, we have tried to determine under which conditions the sector of small and medium-sized enterprises can raise the level of resilience to all “shocks” coming from internal and external environment and ensure sustainable development.

1.1. Concept of Resilience

The concept of resilience is used to explain why so many endangered countries achieve relatively high level of GDP (gross domestic product) per capita i.e., how a national economy is able to return to the previous level speaking of the rate of economic growth and to achieve macroeconomic stability and microeconomic market efficiency. However, economic resilience of a country cannot be achieved unless organizations are also resilient to negative impacts. Therefore, many people see this as two sides of the same coin.

Singapore is usually mentioned as an example in literature, as a country highly exposed to external shocks which managed to achieve high rates of economic growth and high GDP per capita. This reality can be explained as the ability of Singapore to build its economic resilience.

Analyzing the case “Singapore” many professionals are aware of the fact that “the concept of resilience” need not imply an absolute getting back to the pre-existing condition, but it can indicate the ability to respond to challenges resulting from negative impacts and changes. This is confirmed by many researches indicating that “resilience” has an indirect impact on economic growth, private investments and employment [1] goes on to argue that resilience has four domains:
2. THEORETICAL BACKGROUND

The term “resilience” originates from the English language and it can hardly be translated using one word as its meaning is multilayered. It might be best explained with the term “resistance to negative incentives” and the ability of a country’s economy to recover from external shocks of various nature, i.e. from structural changes caused by global market trends to negative impacts resulting from natural disasters and wars.

The term “resilience” was mentioned firstly in 1973 [2] and this work represents a starting point for many studies on the concept of ecological endurance, as well as on many other forms of flexibility. Resilience or resistance of enterprises was defined [3] as the ability of an enterprise to cope with changes, adapt to and recover from negative impacts coming from business environment. He states that, in order to adapt to potential risks, enterprises must have a complex infrastructure management. The key is in the ability of the enterprise to estimate the degree of endangerment, realize mutual relations and interdependence between business activities, information and technologies in the enterprise [4]. Namely, countries having well developed business plans and action plan in case of risks of natural disasters, as well as programs for evaluation of resilience of an enterprise have shown higher resilience index than the countries which haven’t had such plans and programs. This concept is also present in interdisciplinary fields dealing with complex systems, such as enterprises, infrastructural systems and ecosystems [5].

In literature, social and organizational resilience are often analyzed separately. Despite this, to improve community resilience, it is important for organizations to make the link between resilience and organizational competitiveness, and to invest in resilience [6]. Speaking of the importance of organizational resilience we state that organizational resilience directly contributes to faster and more successful recovery of the community after the crisis or disaster.

Building a resilient enterprise should be a strategic initiative that changes the way a company operates and that increases its competitiveness [7]. These authors indicate that a company’s resilience can be achieved by reduction of vulnerability and increase of flexibility, which indicates the company’s ability to get back on “the right path” in case of disturbances.

Speaking of organizational resilience of small and medium-sized enterprises, some authors make difference between big and small enterprises [8]. They believe that small and medium-sized enterprises are more endangered than big enterprises i.e., that their resilience to climatic and other disasters is much smaller due to the fact that they usually are not insured against disasters and that they have limited access to loans, while a majority of them doesn’t have business continuity in emergency situations. Also, risk management is not incorporated in their business strategy and plans. Namely, bigger organizations are better organized than small and medium-sized organizations, they have more resources and greater technical knowledge. Furthermore, there are no strategic programs for operationalization of actions plans for small and medium enterprises. Statistical data also indicate that small and medium-sized enterprises are less resilient than big enterprises. However, small and medium-sized enterprises tend to be faster in giving responses, even if their response is not coordinated. The reason for this is highly simplified structure of decision-making. In addition to fast response to shocks, entrepreneurs should consider high rate of failure of small enterprises with regard to this and to pay more attention to liquidity, cash flows and seasonal fluctuations [9].

Literature on organizations also uses the term “resilience” as a versatile and multidimensional concept [10]. In the context of strategic management and changes, resilience is the ability of self-renewal over time through innovations [11]. Furthermore, building of organizational resilience is connected to employees and management [12], [13], [14] who work in the learning organization.

According to human resource management (HRM), an organization is resilient if people can respond to changes with minimum stress promptly and efficiently and these are positive possibilities of adaptation which separate competition. In the context of environmental changes/emergency management, resilient organizations are able to adapt to new conditions within which they become better and better [15], as well as to develop organizational systems which are capable of overcoming turbulent environmental conditions.
Resilience implies adaptation of corporate strategy \[16\], as well as a solution for organizations having high level of threat in all aspects of their work environment \[8\]. As it can be concluded from literature review, building of resilience is based on prompt perception of changes in the work environment and early adaptive responses. “This means that winners will be unbridled firms that are responsive to challenges and adroit in both creating opportunities and capturing them \[17\].

3. RESEARCH METHOD

This research had an exploratory phase and it is qualitative study in its nature. The findings presented in this working paper are drawn from research conducted in January 2017 and based on an online survey.

3.1. Hypothesis

H1. Incumbent firms suffer from organizational inertia, which prevents them from adapting to new, hostile environmental conditions (Kitching, J., Blackburn, R., Smallbone, D., Dixon, S. 2009).

H2. Creating organizational resilience is associated with employees and management working in learning organization (Vogus and Sutcliffe 2007).

H3. The most effective ways to enhance resilience is a strong motivation system that drives the individual to learn, grow and adapt to their environment (Southwick SM, Bonanno GA, Masten AS, Panter-Brick C, Yehuda, R., 2014).

4. KEY FINDINGS AND DISCUSSION

Data was collected through an online form and a convenience sampling approach was used for this purpose. A total of 50 responses were recorded over a period of one month.

Table 1. Respondents by gender, age, level of current position and work experience

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>53.1%</td>
</tr>
<tr>
<td>Female</td>
<td>46.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>12.9%</td>
</tr>
<tr>
<td>21 to 30</td>
<td>35.5%</td>
</tr>
<tr>
<td>31 to 40</td>
<td>29.0%</td>
</tr>
<tr>
<td>41 to 50</td>
<td>16.1%</td>
</tr>
<tr>
<td>51 to 60</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Current Position</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Management</td>
<td>28.1%</td>
</tr>
<tr>
<td>Middle Management</td>
<td>18.8%</td>
</tr>
<tr>
<td>Supervisor/Team leader</td>
<td>25.0%</td>
</tr>
<tr>
<td>Staff/Individual Contributor</td>
<td>15.6%</td>
</tr>
<tr>
<td>Other</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of Work Experience</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 year</td>
<td>21.9%</td>
</tr>
<tr>
<td>1 - 2 years</td>
<td>15.6%</td>
</tr>
<tr>
<td>3 - 5 years</td>
<td>15.6%</td>
</tr>
<tr>
<td>6 - 10 years</td>
<td>21.9%</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>15.6%</td>
</tr>
<tr>
<td>16+ years</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

A total of 81 executives and staff members participated in the online survey. The survey sample was: 46.9% of respondents were senior executives and middle management. Among the respondents, most were persons aged between 21 and 30 (31.5%) and with work experience between 6 and 10 years (21.9%) (Table 1).

A range of industries was represented, including financial services, accounting, education, information technology and professional services. In our cross-cultural study, seventh per cent of respondents were from Europe (Serbia) and thirty per cent from former Yugoslav Republics. Our survey consist of 15 questions, but we will discuss in our paper only replies on the selected questions which are crucial for our research.
The survey has shown that respondents identify unstable market as a key external factor that made a negative impact on their business in the last several years (Figure 1). However, the most of them consider lack of financial resources (37.5%) as a main internal circumstance (Figure 2).

![Figure 1: Event that made a negative impact (Source: Authors)](image1)

![Figure 2: Internal circumstances that made a negative impact (Source: Authors)](image2)

According to our respondents, one of the most common is organisational active inertia and lack of human resources (21.9 %) (Figure 2). At Sull “active inertia is an organization’s tendency to follow established patterns of behavior — even in response to dramatic environmental shifts” [18].

The problem also lies in an inability of executives to take appropriate actions and managerial incompetence and lack of management and leadership skills in risk management (12.5%).

The analysis done on the basis of the respondents' answers to the question “do you have action plan”, showed that 31% of organisations did not have an action plan to respond to changes in business environment (Figure 3).
Depending on many business’ specific circumstances, there are many possible events that might constitute a crisis:

- Natural disasters - for example, impacts of recent extreme weather events highlight the vulnerability of businesses;
- Theft;
- Fire and few other situations have such potential to physically destroy a business;
- IT system failure - computer viruses, attacks by hackers or system failures could affect employees' ability to work effectively;
- Terrorist attack;
- Crises affecting suppliers;
- Crises affecting customers;
- Crises affecting business’ reputation and etc.

This disruption means pressure on company profits, borrowers, consumers, as well as house and share prices.

In order to test how severe recent crisis affected organizations, we offered respondents five possible answers:

a) It challenged us but was not overly disruptive,

b) It definitely challenged us and was moderately disruptive,

c) It definitely challenged us and was very disruptive,

d) It could have shut us down permanently,

c) We dealt with it as part of business-as-usual

The half number of respondents stated that they dealt with it as part of their business as usual (Figure 4).
In this context, we need to analyse the probability to cope and reduce consequences of crises and to explore the most effective way to enhance resilience of SME’s (Figure 5).

Based on our review, hypothesis H1 is partially confirmed. Namely, organisations do not only suffer from organisational inertia, which prevents them from adapting to new, hostile environmental conditions. The problem also lies in managerial incompetence and lack of management and leadership skills in risk management. The hypothesis H2 that creating organizational resilience is associated with employees and management working in learning organization (Vogus and Sutcliffe 2007), is confirmed by our respondents as well as hypothesis H3. Namely, findings of our study have revealed that strong motivation system which can drives the individual to learn, grow and adapt to their environment and flexibility are the most effective ways to enhance resilience of small and medium sized enterprises. This opinion was expressed by as much as 44% of our respondents (Figure 5).

Limitation of our research is sample size (81 respondents), which can influence our research outcomes. However, it is the first phase of our research. In the next phase, we shall expand our sample and add more questions in our survey.

CONCLUSION

Because the economic resilience needs to be strengthened, achieving economic resilience should be one of the overriding goal of the implementation of long-growth promoting government macroeconomic policies.
The main results of the study pointed out that boosting resilience to the risks of economic, social and environmental shocks should be a top priority and goal because the risks for the SME’s can have serious consequences on entire economies. In line with this, it is necessary through researching and introducing new ways of improving organizations, implementing change interventions and developing new best practice models to recover and adapt to changing circumstances. In this context, our research should have implications for researchers and policy-makers.

REFERENCES


Daniela Stefanescu
Associate Professor
Petru Maior University
Dean of the Faculty of Economics, Juridical and Administrative Sciences
Tirgu Mures, Romania
E-mail: daniela.stefanescu@gmail.com

NEW ORIENTATION ON ENTREPRENEURSHIP AND BUSINESS EDUCATION AT PETRU MAIOR UNIVERSITY OF TIRGU MURES

ABSTRACT

Entrepreneurship education became very important in the last years, based on the entrepreneurs' importance for the knowledge based economy, taking into consideration more and more the local characteristics and the need of creativity, innovation, and new business ideas. At Petru Maior University of Tirgu Mures, there are more than ten years of continuing preoccupation regarding the entrepreneurship and business education development. In this paper, we intend to analyse the changes and the specific approach about entrepreneurship education.

Keywords: higher education, entrepreneurship, entrepreneurial intention

JEL Code: L26, M13

1 INTRODUCTION

Entrepreneurship education (EE) has an increasingly higher attention at the European level, and it was mentioned among the strategic initiatives of Europe 2020. Recently, the European Commission through „Entrepreneurship Action Plan 2020. Reigniting the Entrepreneurial spirit in Europe” (EC, 2013) has highlighted that the investment in EE represents one of the highest return investments, with the highest return that Europe can make. EE is defined as those activities of teaching and learning about entrepreneurship that involve "developing knowledge, skills, attitudes and personal qualities appropriate to the age and the development of pupils or students" (EC, 2002). Education, and especially EE could generate a positive effects on job creation, being a driving force in sustainable economic development and improvements in people's standards of living. (Acs et al. 2014; Singer et al. 2015; EU 2015). As a consequence, in our university we were focus in the last years to adapt our curricula and to adjust to the new orientation at international level regarding EE. Petru Maior University (PMU) was founded in 1960 as a Pedagogical Institute (The Order of the Ministry of Education and Culture no. 3243/1960), and over the years has evolved and, nowadays, its structure contains three faculties on fields as follows: economics, law, engineering, literature and sciences. It is a public university and it offers studies of bachelor, master and doctoral programs. The first bachelor program on business education was created in 1993 as Enterprise Management, and only in 2000 was started the first master program on Business Administration. Based on the various study fields in our university, we have to assure the access to entrepreneurship education to all the students, regardless their main study field, such as engineering, literature, computer sciences or law. Our university was involved in numerous national and international projects, grants which were focused on entrepreneurship or business education, trying to cover many aspects of the process, in order to be approachable for students.

We have to underline that in Romania there are national standards that should be reached by all the universities and there are specializations very strictly established by the National Agency of or Quality Assurance in Higher Education (ARACIS). Based on the national list of possible specializations, the entrepreneurship doesn't exists for bachelor or doctoral programs, only in the master case, where there is a widely area of programs. The situation is different regarding business administration field of studies, because there are few specializations under the “business administration” domain, such as: “Business administration”, “Economy of Trade, Tourism and Services”, “Enterprise economy”, “Business administration of trade,
tourism, services”, another domain proper to the subject of business administration is “management”, and we
find as possible specializations, as follows: “Management” and “Management of rural sustainable
development”. Regarding the doctoral studies, the domains and the specializations are very similar with
bachelor programs.

2 EVOLUTION OF ENTREPRENEURSHIP AND BUSINESS EDUCATION

The first initiative, at national level, in order to sustain students to become entrepreneurs was the
Government Decision (further as GD) no 163/2003 regarding the fiscal facilities for students who want to
start their own business, according to which the solici tors are remitted of initial costs of getting the
authorizations. Based on this legal regulation, at our university level were organized studies about students’
private initiative in the first period after the GD no 163/2003 was adopted.

Over the years, taking into consideration the market evolution and the recommendations of national
and international evaluation of higher education quality institutions, such as ARACIS or European University
Association (EUA), we tried to adept our curricula from all the specializations.

During 2003-2007, a study 1 regarding entrepreneurial initiatives of our students was realized, at the
UPM. Some of the most important aspects discovered are as follows:
- 330 students applied to start a business based on GD no 166/2003;
- 280 enterprises were created, respectively 85% of all requests;
- 171 enterprises were still functioned in 2007.

The students’ entrepreneurs were distributed by faculty and sex, as it is shown in Figure 1. Based on
Figure 1, it can be observed that FEJAS - Faculty of Economics, Juridical and Administrative Sciences -
registered the highest percent of entrepreneurs’ students from the total, respectively, 41%, followed by the FE –
Faculty of Engineering - with 36% and FSL - Faculty of Sciences and Letters - with 23%. Regarding the
number of female and male students, we can noticed that in the case of FEJAS and FSL female students are
much more numerous than male students, 56% to 24% at FESAJ, and 27% to16% at FSL. A different
situation has FE, where the percentage for mare entrepreneurs students is 48%, and for female students only
8%. Thus, the gap between the two groups of students is very large at FE, comparing to the others two
faculties.

![Figure 1 Entrepreneurs students](image_url)

**Figure 1 Entrepreneurs students**

**Entrepreneurs student distribution**

---

1 Boarescu G., Report regarding students’ entrepreneurial initiative of Petru Maior University/
http://upm.ro/career_center/cc_rapoarte.htm/ accessed at 03.03.2017
**Source:** our own calculation, based on data from [http://upm.ro/career_center/cc_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

When they were asked about the resources needed to start their own business, the answers obtained are presented in Figure 2.

![Figure 2](image)

**Figure 2**

Resources needed to start a business

The domains of the starting business, as we can see in Figure 3, most of them, 73% are in the services sector, 22% in trade sector and only 5% in the industrial field. Based on the students’ answers we can observe they consider as main problem the financial resources, on second the managerial skills, and at the same level of importance, 13%, material and human resources.

![Figure 3](image)

**Figure 3**

Fields of the new business creation

**Source:** our own calculation, based on data from [http://upm.ro/career_center/cc_rapoarte.htm/](http://upm.ro/career_center/cc_rapoarte.htm/) accessed at 03.03.2017

The existing specializations accredited for the university year 2016-2017 are presented in Table 1, for all three levels: bachelor, master programs. The doctoral programs are organized only at Faculty of Letters and Sciences, in the domains of Literature studies and History.
<table>
<thead>
<tr>
<th>Faculty</th>
<th>Bachelor specializations</th>
<th>Master specializations (1 or 2 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Engineering (FE)</td>
<td>The Technology of Mechanical Engineering</td>
<td>Quality Management Systems</td>
</tr>
<tr>
<td></td>
<td>Economical and Industrial Engineering</td>
<td>Computer Graphics and Industrial Design</td>
</tr>
<tr>
<td></td>
<td>Automation Applied Informatics</td>
<td>Computer Aided Design and Manufacturing</td>
</tr>
<tr>
<td></td>
<td>Electro-Energetic Systems Engineering</td>
<td>Management of Energetic Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automatic Systems of Managing Industrial Processes</td>
</tr>
<tr>
<td>Faculty of Sciences and Letters (FSL)</td>
<td>Computer Science</td>
<td>History of Literature and Literary Criticism</td>
</tr>
<tr>
<td></td>
<td>Romanian Language and Literature - English Language and Literature</td>
<td>Anglo - American Studies, Intercultural Perspectives</td>
</tr>
<tr>
<td></td>
<td>Applied Modern Languages</td>
<td>Information Technology</td>
</tr>
<tr>
<td></td>
<td>Communication and Public Relations</td>
<td>World History, International Systems and Relations</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>Elites, Culture and European Construction</td>
</tr>
<tr>
<td></td>
<td>Political Studies</td>
<td></td>
</tr>
<tr>
<td>Faculty of Economics, Juridical and Administrative Sciences (FEJAS)</td>
<td>Accountancy</td>
<td>Business Management</td>
</tr>
<tr>
<td></td>
<td>Finance &amp; Banking</td>
<td>Business Administration of Trade, Tourism and Services</td>
</tr>
<tr>
<td></td>
<td>Economy of Trade, Tourism and Services</td>
<td>Financial-Banking Administration</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td>European Professional Master in Public Administration</td>
</tr>
<tr>
<td></td>
<td>Public Administration</td>
<td>Accountancy and Audit</td>
</tr>
<tr>
<td></td>
<td>Law (4 years, daily)</td>
<td>Juridical Institutions and Liberal Professions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Resource Management</td>
</tr>
</tbody>
</table>

Tabel 1
Fields of specializations at PMU
Source: http://iuniweb.upm.ro/ accessed at 14.03.2017
As it could be noticed in Table 1, there are many economics and business administration specialization at our university, but there are numerous other specializations from totally different domains. Thus, we cannot use the same approach to all the students, regarding entrepreneurship education.

In order to choose the proper approach regarding business and entrepreneurial education, for students from different specializations, we applied over the years questionnaires and we found out similarities but also differences between engineering and economics students. When they were questioned “If there is EE in their programmes of study”, as we can see in Figure 4, students from engineering and from business specializations consider the item correct. A higher percentage belongs to business students 84.67% comparing to 65.12% relative to the engineering students.

![Figure 4](image)

Is there EE in the curriculum?

At the question “Do you want to become an entrepreneur after graduation?”, the students answers are presented in Figure 5.

![Figure 5](image)

The intention to become an entrepreneur

As it was expected, the results regarding the intention to become entrepreneur after graduation are also in favour of business students, 67.30% from them answered affirmative to the question, comparing to the engineering students, who had positive answer in 59.70% from their total number.

We can observe that even if the difference between the business students and engineering students regarding the perception about EE in their curriculum is significant (19.55%), when they were questioned about their intention to start their own business, the answers distribution is not so significant anymore, being only 7.60%. Thus, we have to be able to assure entrepreneurship education in the same measure for both categories.

The initiatives taken by PMU regarding EE, over the last 12 years, can be placed within the broader framework, as follows:
a) Postgraduate programmes:

- European Integrated Rural Entrepreneurship (1 year) launched in 2002;
- Entrepreneurship and business development (2009-2011);

b) The inclusion of some courses having a significant entrepreneurial component in the Master’s degree and bachelor programmes such as Entrepreneurial Creativity, Entrepreneurship (2004), Entrepreneurial Economy (2005);

c) Agreement signed with the organization Junior Achievement Romania. National contests for students have been developed based on this agreement such as Student Company, Business Ethics (since 2004);

d) National and international projects, such as:

- “Research regarding the harmonization of entrepreneurial education in Romanian universities with universities from European Union and Eastern Europe” (2006 - 2008) aiming to create a national network among Romanian universities and to elaborate a curriculum for entrepreneurship education at bachelor level;
- “European EE” (2007-2009) aiming to implement and elaborate an optional module of entrepreneurial education for students attending bachelor or master programs in Engineering, IT, Physics, Chemistry, Biology, etc. This optional program was also destined, through a system of continuing education, to higher education graduates who wish to acquire knowledge and skills in the field of entrepreneurship, in order to start their own businesses. There have also been developed curricula for entrepreneurship education, books, methodologies and teaching aids appropriate to the implementation of the created curricula;
- “Spread The ART of going UP – STARTUP” (2014-2016) has as main objective the development of entrepreneurship and the familiarization of the project participants with concepts such as startup businesses, innovation and entrepreneurship through the cooperation with entrepreneurial, educational and public institutions from Greece, Italy, Portugal, Romania, Slovenia, Spain and Turkey.;
- “EQVET-US European Quality Assurance in VET towards new Eco Skills and Environmentally Sustainable Economy” (2014-2016);

(e) The International Summer School BEST (2011-2016);

(f) Introduction in all curricula from non-economic studies at least 2 courses related to entrepreneurship education (since 2015).

CONCLUSIONS

Thus, it more attention needs paid to the “development of metacompetencies in students studying engineering, allowing them to operate effectively, fostering entrepreneurship and employability” (Ling and Venesaar 2015).

Our paper highlights that within PMU, there is a perception of a high level of EE among our students. The difference in perception between the engineering and business students underline the need to align, to a greater extent, the engineering curricula towards more diversified forms of EE, according to the fact that they already have a practical component, much more proper to entrepreneurial activities.

At the same time, it is necessary to provide the required knowledge on entrepreneurship and, in particular, the development of entrepreneurial skills based on appropriate teaching methods. Under these circumstances, an important role is held by those universities which should encourage the development of students’ creative side, and arousing their interest in becoming entrepreneurs, considering self-employment as a viable career. Our results have important implications for both teaching and research of entrepreneurship. A special attention is needed to improve and develop higher entrepreneurship educations for engineering field.
Thus, universities are recognised to play an important role (EU 2012; Sieger et al. 2014; EU 2015) in increasing entrepreneurial intentions based on higher effectiveness of entrepreneurship education, as they can improve “human resource employability and the matching of skills to the labour market needs” (Herman, 2014).

LITERATURE


Zsuzsanna Nagy-Kovács  
Water production engineer, Budapest Waterworks Ltd.  
Budapest, Hungary  
E-mail: zsuzsa.nagy@yahoo.com  
Prof. Dr. Katalin Takács-György  
Professor, Óbuda University  
Budapest, Hungary

WATER – THE ESSENCE OF GROWTH

ABSTRACT

Water has played an important role in human history and civilization. The aim of this article is to demonstrate that water – with its specific features – is essential in economic development. In the first place it is deduce how water found its place among economic goods. Secondly, the demand and supply of our days is detailed with an outlook to imminent changes related to the growth of population and climate change. Finally, the role of water in development will be evolved considering the challenges and the means of a favourable outcome.

Keywords: water, economic growth, sustainability, climate change.

JEL Classification: Q25

INTRODUCTION

The wide spread of crisis in water management is well known among economists and water professionals. Though it has been recognized many decades ago, still the ultimate solution has yet to be found. This rises urging concerns as the role of water in economic development is becoming more and more evident.

Scientists, politicians, engineers try to determine different aspects of the problem with approaches from their field of proficiency. But the special features of water makes their work challenging: its ever changing availability, shrinking quantity and degrading quality transforms economic definitions and approaches.

THE ECONOMIC CONCEPT OF WATER

Water is one of the most common natural resource that can be found on Earth. Still, it has been hindered to establish its concrete place in economics for many centuries. To understand the complexity of the problem, one must look in detail into the concept of value and the many ways water is used. Obviously water as a commodity played an important role not only in the clarifying of the economic concept of value, but also in developing the necessary operational processes for measuring it.

1 INTERPRETING VALUE IN ECONOMICS

To start with, it must be understood, that value has two separate meanings in economics: one is the value in use and the other is the value in exchange – with bearing in mind the comparison made by Smith between diamonds and water. According to Plato „only what is rare is valuable and water, which is the best of all things, is also the cheapest“. Both definitions tried to express that the market price of an item needs necessary not reflect its true value. Looking further, Dupuit and Marshall pointed out that even items having no market price at all can have a positive economic value – a remark that has been accepted in modern economics only in the second half of the XX. Century when the method of non-market valuation emerged [1]
In particular, water has a very specific feature, notably its marginal value declines sharply: people would pay very high prices for drinking water, as they need it to survive but tend to appreciate it much less when water is abundant. Therefore drinking water is a good with generally high consumer surplus.

**WATER: AN ECONOMIC GOOD**

A broader understanding of economic goods can be interpreted in the following: people may value a natural resource out of considerations unrelated to their own immediate and direct use of it, they may wish to preserve a future option of satisfaction or would like to protect it for future generations. [1] In the following an overview will show, how economics arrived to this concept.

Ward and Michelsen equate the economic value of water with its market price. They state, that „the economic values of water, defined by its price, serve as a guide to allocate water among alternative uses, potentially directing water and its complementary resources into uses in which they yield the greatest total economic return” [2].

A new approach was the extension of the economic concept of value to a broader class of items than just market commodities: anything could actually be a market good from which people derive satisfaction. This was formally demonstrated by Maler [3] when he showed that the modern formulation of the problem in terms of duality theory, carry over from the valuation of market goods to non-market items. His findings lead to the following conclusion: the natural environment is a common property.

At the 1992 International Conference on Water and the Environment the four Dublin Principles were declared. One of them holds that water has an economic value in all its competing uses and should be recognized as an economic good. The spectre of this sentence seemed to be wide: from “water is no different from any other economic good” [4] to “the Earth's freshwater belongs to the Earth and all species [5]. Baumann and Boland is correct when they point out that water is a necessity. However, water is perceived as having a special significance that most other commodities do not possess: its special economic features.

Furthermore, water is both a private and a public good. By contrast, most of the other commodities associated with food, shelter and clothing are purely private goods and have no public goods aspect. The public good nature of water influenced its legal status: in Roman law and to an extent of Civil Law systems, flowing waters are treated as common to everyone (res communis omnium) and are not capable of being owned. These waters can only be object of rights of use [6].

The specific features of water highlights, why the road presented above was so rocky. The mobility of water and the opportunity for sequential use and re-use make water relatively distinctive as commodity. By consequence, it is essential to find the tools to internalize the externality associated with the mobility and return flows.

The variability of water supply in terms of space, time, use and often quality had a major impact on the global prise of the good: the uneven distribution on the globe, the distribution of precipitation for a given region and the use for example in agriculture, where irrigation is needed only in well-defined periods of the year.

**Uncertain supply**

The challenges the world will face in adapting to water issues are enormous. According to many projections [6], as the water cycle is a closed dynamic system, the total volume of runoff will be relatively stable and the amount of global surface water remains fairly fixed. The problem roots in more complex aspects: these are the extremities that will cause major concerns. More frequent natural disasters are imminent: droughts, floods, uneven precipitation escalating in torrential rainfalls, higher water temperatures and all the consequences that are related to these tendencies. The changing environment obviously affects the water supply making it more unpredictable.
High and dry

Those countries which experience already considerable amount of water stress will become even more water scarce: the MENA region, Central Asia and Central America. Notably, much of the decline in runoff is projected in the least developed countries. When drought hits a region that is already water stressed, migration to the cities is induced: economic migrants head to the urbanized area, instead of seeking other alternatives for adaptation strategies. Drying events are thought to have fueled transboundary invasions back in the ancient times: China and Egypt experienced these threats that lead to political instability. Today, due to the delicate nature of war – where the process is generally costly and outcome is rather uncertain – even in transboundary water conflicts, disputes are mediated and peaceful resolution is facilitated on an international level. However, water conflicts within a country are much more widespread: water shocks are usually followed by spikes of violence leading to regime change in developing countries. No surprise, these are the areas, where population living on the edge reacts sensitively to the slightest decrease in income. [6] Hungary has a very privileged situation with its many affluents. However it must be considered that the amount of water entering the country is decreasing: according to the Hydroinfo databasis the average Danube level decreased by 1cm in average in the last 100 years.

When it's too much

Floods cause a more visible and perhaps an even more rapidly growing toll. A recent study used meteorological data to reconstruct every country’s exposure to tropical cyclones during 1950-2008 [6]. It found that national incomes decline after a disaster and do not recover within 20 years. The results suggest that future cyclone activity would result in costs of about USD 10 trillion larger than previous estimates. What aggravates the situation even more is that the process of urbanization is the most dramatic in low- and middle-income countries: the number of dwellers is projected to grow by 2.5 billion people [6] mainly in flood-prone areas, deprived of municipal water, sanitation and flood protection.

In case of Hungary unprecedented floods raise major concerns: in 2013 historical flood records were registered along the Danube without severe consequences, for this time. But it is essential to bear in mind that more than one quarter of Hungary’s population is served by piped water produced by river bank filtration – therefore flood protection should become a priority in water management in the country.

The economic effects of water shocks are diverse. It can cause nutritional deficits or health impacts in young children, or income shocks that prevent families from investing in their education. The fetal origins hypothesis demonstrates – and mounting evidence shows – the important role that early-life conditions can have on future life success [7]. A less competent population with hindered economic background obviously decelerates or even detain growth.

Treasure underfoot

Aquifers contain about 30% of the available freshwater of Earth and act as a natural buffer against climate variability [6]. If protected and managed along with surface water, groundwater can do much in adapting to climate change. It loses negligible amount of water through evaporation and transpiration. Long retention time and slow response make it more buffered against environmental changes. However, the quality of ground water is influenced by climate change too: rising sealevels push seawater inland, resulting in quality issues.

To conclude the above presented it is essential to see, that in the present situation an improved water supply for the nearly one billion people around the globe is needed. But it should be considered too, that the world’s population is still increasing in those areas where water security is still a major issue to be resolved. Hungary is renowned internationally for being rich in groundwater. However recently it has been proved that the groundwater level is decreasing and the natural habitats in many parts of the country are becoming endangered.
Thirsty demand

The total amount of water demand has been challenging to define. The World Bank created a new perspective to determine the drivers of demand: farms, cities, energy and environment – called the expanded water nexus, represented in Figure 1. According to their concept in the coming three decades the global food system will require 40-50% more water, municipal and industrial water usage will increase by 50-70%, the energy sector is projected to experience a boost of 85% while the environment will receive even less and worse of water [6].

![Expanded Water Nexus](image)

**Picture 1.** The expanded water nexus [6]

Meeting food security challenges

Water fits the definition of essential final good: no life is possible without water. Biologically human life is not possible without at least 5-10L/day per person of water. The UN and the WHO determined the limit 20L/day per person, while Gleick [8] argued that this limit was too low and advocated that the basic human need should be at least 50L/day per person. However, if we compare this necessary minimum, with the average water consumption in the developed world - about two magnitude of difference - it can be declared, that water demand grows sharply as life circumstances improve.

On the other hand it is important to see, that as life is impossible without any access to water, the problem for those, affected by water security issues are more related to quality. These two observations highlight the need to adopt a behavioural approach, where the focus is not on the need but rather on the amount of water that is covered by the willingness to be paid. World Bank has experience of studying the phenomenon. It proved that households spend considerably more on water – mainly to purchase water from vendors – than the expected 3-5% of income. The question therefore is how much people value piped, public water supply relative to the existing alternatives. Compared to electricity – another influential service - water is lagging behind [6].

Sustainably feeding 9 billion people by 2050 is one of the greatest challenges: food production needs to duplicate over this period while methods must be found that do not degrade natural resources [6]. The agriculture consumes already 70% of the available freshwater – being the single largest anthropogenic water user. Little additional surface water is available in many parts of the world. The increasing number of closed basins is becoming an urgent problem: groundwater aquifers are heavily exploited and groundwater abstraction requires approximately 30 percent more energy than surface water irrigation. This results in significantly higher greenhouse emissions: 4 to 6 percent of India’s total carbon emissions. Not to mention the water quality related problem of fertilizers: in the most developed parts of the globe phosphorus and nitrogen concentrations have already reached unsafe levels [6].
Changing cities and changing climate

Over half of the world’s population lives in cities that generate about 80% of global GDP. And the world keeps on to become even more urbanized: in the next three decades water demand is expected to increase by 50 to 70%. One in four cities worldwide experiences water insecurity. Flooding, heat waves and rising seas can degrade the quality of surface and ground water that can indirectly disrupt the urban economy. In Jakarta flood related financial losses reached USD 900 million in 2007, when a major flood occurred reaching 25% of the city. And things will get worse: the city confronts a sea-level rise of 60 cm or more over this century – the Northern parts of Jakarta are predicted to be 4 to 5m below sea level within 20 years [6].

Water for energy

Cleaner energy sources consume surprisingly high amount of water causing distinct trade-offs between the use of water and energy.

Surprisingly, the thirstiest business among the renewable energy sector is solar energy production. Desalination and water recycling are not economically feasible options for lower value added uses: desalinated water costs about 4 to 5 times more than treated surface water. Wind turbines are the best choice, if one considers water performance [6].

Environmental water requirements

Environment is the residual claimant of water resources: receiving what is left behind by the previous uses and much of this is polluted. It is estimated, that 20 to 50% of the total available water in each basin is required to maintain plant and animal life and sustain critical ecosystem services like water purification, while temperature changes will likely increase the needs of these ecosystems. It is especially challenging, how to determine the environmental water requirements – as each and every waterway has unique circumstances. The Australian experience is a very good example of environmental stewardship as smart water resource management can partly mitigate the environmental impacts [9].

The fuel of economic growth

It is known that many of the world’s major cities owe their origin to their location along coasts or rivers where water-borne transportation was facilitated. However evidence is less obvious and more negative as of today while it is surprisingly difficult to measure the concrete benefits associated with an increment in water availability; these difficulties are clearly evident in the literature on water and economic development.

In 2015 the UN has determined seventeen Sustainable Development Goals with clean water and sanitation listed as the sixth. Considering the expanded water nexus presented in connection with demand, it can be deduced how all sectors of society are interlinked through the common currency of water. This is an essential cornerstone to start from while defining the relation between water availability and economic growth [10].

However, water shortages are becoming more obvious, much of the world’s water is used inefficiently by industry, cities and agriculture even in arid areas; and much of it is wasted without economic benefit, often with negative economic impacts. It seems that having an adequate supply of water might be a necessary but not a sufficient condition for economic growth: with areas lacking an adequate amount of water will not flourish economically. When water is in short supply, there will be changes in what is produced, where it is produced and the efficiency of production.

But vulnerability discourages major investments – especially water infrastructure related projects. This tendency affects the Poor, as their circumstances will not be ameliorated: poor households are less robust and more vulnerable and also tend to be located in higher risk areas that are prone to be more affected to water related threats.
The third threat being climate change has important consequences as well. The expected global damages are small relative to the expected global GDP in 2050, ranging between 0.37 - 0.49 while significant variations exist between regions [6]. Western Europe and North America, where much global GDP is produced, experience negligible damages in most scenarios. The bulk of losses are in the Middle East, the Sahel and Central and East Asia and the magnitude of losses is largely driven by the level of the water deficit. The economic consequences are highly unequal with the worst effects in the driest regions.

Balancing water

Water is a complex natural resource. About 1.6 billion people live in countries with physical water scarcity – a number that will double in only two decades. This results in an ever increasing constraint: demand for water is ever increasing, but supply remains fixed and more variable.

According to Karl-Göran Maler the basic cause of environmental degradation is the failure of the markets to deal adequately with public goods [11]. It is therefore essential to find the way to allocate water to sectors and uses where demand and value added is greatest.

While in the World Bank report [6] it is stated that the problem of water is not one of economics but politics, not one of physical shortage but governance – where the generic problem of water is one of matching demand with supply, of ensuring that there is water of a suitable quality at the right location and the right time.

When governments respond to water shortages by boosting efficiency and allocating water to more highly-valued uses, losses decline dramatically and may even vanish. Improved water stewardship thus pays high economic dividends. Prudent water-management policies can do much to secure growth. This requires using market forces and prices to guide water allocation decisions. The benefits to managing water resources as a valuable economic resource are considerable. Water that is provided for free promotes and condones overuse and waste. More efficient water pricing, coupled with policies that safeguard the most marginal members of society, can therefore ensure that sufficient water is conserved and guarantee enough water to meet basic needs.

The prices paid by industry, agriculture and residential users are often unrelated. Furthermore the price of water that most users pay for water reflects its physical supply cost –capital and operating costs - and not its scarcity value. However, some countries – including Hungary – levy an abstraction charge for water these charges tend to cover rather administrative fees and are not based on an assessment of the economic value of the water being withdrawn.

CONCLUSIONS

According to those that have been summarized in this article, it can be understood that water is an economic good and that it has an obvious effect on economic growth. However, it is not a direct connection: it manifests through water availability and uncertainty that is becoming an ever increasing issue. Efficient allocation across water sources and uses are essentials for long term achievements while growing populations, rising incomes, and changing climate all three increase the competition for a limited resource. To alleviate the problem solution must be found by the means of economic models and effective policy programs must be established on a global level.

LITERATURE


---

SEUSO TREASURES

The Hungarian Government has repatriated the Seuso treasure, a spectacular hoard of 4th-century Roman silver whose ownership had long been contested by several countries. The second parts of the collection is exhibited in the Hungarian Parliament.

Photo © by Dr. Antal Szabó
FROM AN NGO AND DONOR DEPENDENCE TO A SUSTAINABLE SOCIAL ENTERPRISE

ANNOTATION

The reality is that the old NGO model simply cannot be sustained in a time of shrinking government funding and increased call for efficiency and impact in international development. It is time to realize that NGOs need to become more independent from Governments, financially resilient and accountable for their activities. By Chris Meyer zu Natrup, September 2014 Devex


Keywords: non governmental organizations, social enterprise, sustainable social enterprise, MYSA – Mathare Youth and Sport Association in Nairobi

JEL Code: L26, L30

1. WHY MOVE FROM AN NGO TO A SUSTAINABLE SOCIAL ENTERPRISE (SSE)?

Most NGOs have two huge problems. First, they are partial in that their activities (in general) only cover a part of the problem they tackle – micro-credit, education, health provision, entrepreneurial start-ups etc. They are either confined to only a few geographical areas or part of the issue such as female primary education. Often NGOs simply do the work that Governments cannot afford to do. Second, at the end of every project cycle they look for funding in grant form. In fact probably most NGOs spend half their time (and therefore resources) looking for donors.

---

2 Dr. Michael Hopkins
CEO, MHC International Ltd, London, Geneva, Mauritius (CSR & Employment Research and Advisory Services)
CEO, CSR&Financial Institute, ‘socially responsible financially smart’ workshops & online
Founder CSR Meetups (Geneva, Washington DC, New York, Amsterdam, Athens, Mauritius, Boston, Accra, Mumbai)
“Video on Michael’s New Book – CSR/Sustainability: From the Margins to the Mainstream 4mns” Book available on Amazon.com, @mjdhopkins also @CSRFI
Of course, many NGOs – we can think of Médecins Sans Frontières, International Red Cross, Amnesty International, Transparency International, Greenpeace, WWF etc – are either advocacy organisations or performing tasks across countries that national Governments can not do.

But many, if not most, NGOs are supported by external funds and basically stop once the funds dry up. Many Governments from the rich world support NGOs through their aid budgets as well as support coming from philanthropic donors. But the former is starting to dry up as ‘populism’ or ‘illiberalism’ starts to make people more selfish. The latter is also under examination as philanthropists start to examine socially responsible investment. There, as UBS recently noted, an investment in a socially responsible activity could lead to modest returns and one’s capital preserved. Philanthropy means all money invested is totally lost and the return on investment is zero. Clearly, an alternative that leads to sustainability through money earning activities that may also make profit, is highly attractive. That is why the notion of a SSE has risen so quickly and becoming popular around the world.

2. NEED A MORE SYSTEMS APPROACH THAN INDIVIDUAL PROJECT APPROACHES: WHAT TO DO?

Most entities such as an institution are systems and therefore a systems approach is very helpful in ensuring the various bits and pieces fit together in a whole, were each person knows their responsibility – also known as Performance Management.

Chris Meyer references above suggest six key steps that are needed to take an NGO into being a fully-fledged SSE. Briefly, these are:

1. **Cut down to (bare) essentials**
   - Decide what you are good at and cut down everything else.

2. **Get help — but not too much**
   - Make sure one or two consultants are there to help with the development of business plans for each business unit, working with — not just for — the board and managers.

3. **Build a business plan — a real one**
   - Setting out our values and ambitions, and spelling out the external forces influencing the organizations do not count. And yet, the business plans of many NGOs are just that.
   - A real business plan addresses the six operational areas of any organization: activities, structure, communication, HR, finance and support infrastructure.

4. **Accept the casualties**
   - Be clear in your communication and expectations from each staff member. Ask them if they really understand the need for and the path of the change. Ask them if they think they have the skills, tenacity and motivation to see it through.

5. **Give profit-and-loss skill and responsibility**
   - Giving people the skills and responsibility to run their own profit and loss creates better results and increases satisfaction of most managers.
   - Profit is not a dirty word in the development and aid sector, and once everyone understands that a reasonable surplus actually ensures sustainability and independence from donors, most managers support it enthusiastically.

6. **Move toward ‘open development’**
   - Ensure transparency and accountability are central to the process.
Putting all these steps together provides a Plan to look at all aspects of the NGO and identify parts of the system that need to be preserved under existing rules. That means those that are key to the NGOs activities but are not easily turned into profit centres, they must be financed by other profits centres or by direct grants. Then to look at areas that can be expanded or created to become revenue earners. We look next at an NGO in the slums of Nairobi that was set up by one of the authors thirty years ago and explain, briefly, how the above steps are being implemented under the guidance of another of the above authors.

3. MYSA AS AN EXAMPLE OF CHANGE FROM NGO TO SSE

**What is MYSA?**
The Mathare Youth and Sports Association (MYSA) was set up three decades ago by one of the authors when he was working for the UN in Nairobi. One day he went to a part of one of the poorest slums in Africa with one million people and saw three youths kicking a can around in the midst of rubbish. He asked them why they didn’t clear up the rubbish—not our problem was the reply. He then promised them a new football if they cleared up the rubbish in three days. They did. He did. MYSA was founded under the vision of Bob Munro:

‘You do something for me and I’ll do something for you’

Today:
Thus, MYSA was founded and registered as a self-help youth sports and community development project in 1987 and was first based in Mathare—one of Africa’s largest and poorest slums. Then, but less today, a million people live in slums and call these slums their home, living in mud huts with no clean water, electricity or sanitation. When you grow up in a place like this, it can be hard to be optimistic about your future.

Today over 30,000 youth on 2052 teams take part in the MYSA sports, slum cleanup, AIDS prevention, leadership training, jailed kids, photography, music and other community development activities. Another 10,000 youth from eight countries participate in a similar sport and development project initiated by MYSA in 1999 in the Kakuma refugee camp in northwest Kenya.

Sport is combined with community outreach and development activities. To give young people the skills and confidence they need to aim higher, achieve more and improve their lives. MYSA is run by the Youth and for the Youth who take part in its activities and gives the youth an opportunity to dream of a brighter future.

Today, there are 30,098 (Boys 20,107 and Girls 9,991) football teams in 234 Leagues across MYSA’s 16 zones. But MYSA is more than football, apart from goals, teams earn points from taking part in other activities off the pitch, like community cleanups, participating in HIV/AIDS awareness sessions and volunteering as a referee or a coach for other teams. This earns extra points which could be the difference between a team winning the league, or being relegated.

Since then:

- MYSA has been a global pioneer on sport4development&peace for three decades
- But MYSA’s also been donor dependent during those three decades
- MYSA’s now committed to a new and trailblazing transition to a SSE
- MYSA’s transition anchored by its new performance management approach
- MUFC/MYSA nominated for Nobel Peace Prize:

“A team from the slums of Nairobi have been nominated for the Nobel Peace Prize. The Mathare United Football Club (MUFC) and the Mathare Youth Sports Association (MYSA) are among the 165 nominees alongside such disparate hopefuls as Bono and the Pope … In return for the facilities and organisation, the players keep their neighbourhood clean, plant trees and attend AIDS, pregnancy and drug-awareness classes. There are scholarships too, for photography, music and drama. Teams get points for their work as well as their football.”

“The Pope, Bono and Mathare United FC”, The Observer (UK), October 5, 2003

- BBC documentary on MUFC scoops 2009 Foreign Press Award:

“In the deep mire of poverty that is Mathare, a giant rotting shanty town of Nairobi, the Mathare Youth Sports Association (MYSA) has tapped the enormous passion for the game to create a unique programme of football coaching and social and personal development. Founded in 1987, MYSA has become Africa’s largest youth organization … Participation and coaching is linked to voluntary public service. The senior team, Mathare United (MUFC), built on this huge foundation … gained national league status and then won two of three Kenyan Cup finals in the next four years. The message has not been lost on aid agencies elsewhere who have sought to use football as an instrument of post-conflict reconciliation in Liberia and Sierra Leone.”

MYSA’s most successful failure is Moses Mutuli who lost the goalkeeper competition for the 1992 MYSA U16 team for the Eco-Youth Tournament in Brazil. He then refocused on his studies, graduated at the top of his class at the University of Nairobi, won a Rhodes scholarship to Oxford University, qualified as an actuary, worked for Deloitte in London and South Africa and is now Head of Actuarial Services at CfC Life in Kenya. In 2011, Moses became the first MYSA alumni to join the MYSA Board of Trustees.

4. HOW IS MYSA BEING CHANGED INTO A SSE?

The work started in 2015 and is aimed to be completed by 2020. Already MYSA has created profit making social enterprise centres in:
- Training/consultancy services on sport4development/peace
- MYSA Fitness Centre
- MYSA Sports Café

Planned include income generating activities such as:
- Sports Hall rental for external functions (e.g. weddings, meetings, etc)
- Playing field/stadium rental
- Branded products
- Physiotherapy Clinic(s)
- Borehole water sales

Much of MYSA was already a social enterprise but provided its services for free. For instance MYSA has trained many professionals including professional soccer players such as Wanyama at Tottenham Hotspur in the EPL. Yet got no return on its training investment. Today each entrant into the MYSA complex is asked to sign a form that says, should their income exceed a certain level, they will give 1% of their revenue to MYSA.
5. FINAL REMARKS: NO QUICK WIN NOR OPPORTUNISTIC BUT LONGER TERM

As in all things in life, there are no quick fixes. Yet already MYSA has been copied in over 300 NGOs around the world. Next step is to create a sustainable MYSA that is 75% free of grants and also to work with other NGOs, Governments, donors and International Organisations to bring the dream of development to young kids around the world while remembering:

‘You do something for me and I'll do something for me’

PS The only ‘work’ in the above was mentioning a certain young man from Nijmegen!!
THE ROLE AND IMPACT OF FAIRNESS ON COOPERATION IN HUNGARIAN METAL AND MACHINERY SUPPLY CHAINS

ABSTRACT

Our survey investigates fair behaviour on one hand from network perceptions and on the other hands if ethical behaviour brings benefits for companies in their relationships. The results of our qualitative research show that fair behaviour has certain positives and actors perceive network effects as one of general conditions around them.

Keywords: business ethics, supply chain, business network

JEL Classification: M14, M21, P13, P20

1 INTRODUCTION

A business network can be approached by network of interactively connected business ties. On one hand the networks offer a natural arena for ethical issues while it colligates the divergent interests of actors (Halinen – Jokela, 2014). This raises the question how much a company is able to give up its own goals and plans so as to support another business partner. But in this way business network can increase its members’ well-being because it believes and follows the importance of collective aims and interests (Ford – Håkansson – Johanson, 1986). On the other hand business relationships inside a network include ethical norms as mechanism of business management (Håkansson – Snehota, 1995).

The globalisation and spread and development of supply chains mean an obvious need and challenge to shift the focus of b2b investigations from relationship level to network sphere (Halinen et al. 1998; Veres, 2008; Veres, 2009). In this study we set ethics and its more concrete form fairness into the spotlight and describe what existing research reveals about their importance for business networks.

Our study first shows a short summary of relevant literature. In the second part of our study we introduce the first findings of our survey when during course of in-depth interviews we ask Hungarian companies and advisors from metal and machinery industries about the roles of business ethics in their supply chains.

2 LITERATURE REVIEW

In this chapter we look through briefly the relevant literature of business ethics mainly from network aspects. Business ethics is a form of applied ethics. It includes not only the analysis of moral norms and moral values, but also attempts to apply conclusions of this analysis to the assortment of institutions, technologies, transactions, activities and pursuits that we call business (Velasquez, 2012).

An early survey of 1300 leaders of totally 325 enterprises in Hungary in 1996 showed a quite mixed picture handling ethics on a firm level (Chikán A. 1997). The researchers of this survey had the opinion that handling ethics at firm level was at early stage while about 10 per cents of respondents had their own ethical codex. Those firms showed more ethical behaviour which tried to achieve larger turnover in developed export markets. But according to their data the ethical behaviour of Western companies operating in Hungary were not outstanding in those years.

Hajnalka Csáfor (2010) found that the most important motivation of continuity of corporate social responsibility (CSR) of the interviewed large Hungarian firms was ‘to apply for their basic company values’. This result seems to confirm Szegedi’s (2001) view for strengthening ethical issues. In Csáfor’s survey other

Dr. Noémi Piricz
Associate Professor and Head of the Department of Management and Enterprise Sciences
University of Dunaújváros, Hungary
E-mail: pimeon@gmail.com
essential priorities were: ‘acting as ethical company’, ‘contribution to sustainable development’ and ‘maintenance of good reputation’ finally ‘getting more customers and new markets’. The investigated small- and medium sized enterprises (SMEs) represent a little bit different opinion. The SMEs think that ‘getting more customers and new markets’ is the most important and only after this aspect come ‘decrease of costs’, ‘maintenance of good reputation’. Finally they rank ‘acting as ethical company’ and ‘contribution to sustainable development’. The two very different priority lists – based on sizes of respondents – prove that for SMEs the short term profitability plays a much more important role. We have found a cultural speciality during review of relevant Hungarian literature. When authors deal with issues of ethics they often focus on unethical behaviour or more concretely corruption (e.g. Fazekas et al., 2013; Czibik et al., 2011).

We use now Chikán’s (2004) definitions for supply chain: such value creating row of processes, which is necessary for establishment of certain product and service package and steps out the boundary of cooperating organizations in order to satisfy customer demands. The building stones of supply chains are the different kinds of organizations and their relationships. The conceptual framework of supply chain in Cooper et al’s (1997) view emphasizes the interrelated nature of supply chain management (SCM) and the need to proceed through several steps to design and successfully manage a supply chain.

Hámori et al. (2007) investigated the competitive and cooperative behaviours of companies and found that 63 per cents of respondents thought that cooperative attitude is low among economic actors and in 22 cases (28 per cents) identified lack of trust as result. The second frequent reason was lack of cooperation. Kolos et al. (2006) also find that such characters of inter-personal relationships as sincerity, reliability and readiness to help, have basic importance in evaluation of relationships.

In Hungary, after the dissolution of the Eastern Block the foreign ownership of total Hungarian economy was 11 % in 1992 and this rate achieved 41% by 2000 which is extremely high even in international comparison (Kádár et al., 2004). FDI had and still today has positive effects on Hungarian export and strengthened Hungary’s position in world economy. Between 1992 and 2004 Hungary welcomed totally 40.7 billion USD FDI. This amount per capita is three times higher than the Czech and Polish data (Karsai, 1999). So the companies with foreign ownership have achieved dominant role in most of the key sectors in Hungary. Multinational companies have found the country as an interesting option for investing and sourcing, for example in machinery industry firms of foreign ownership accounts for 78 % (Karsai, 1999) and skilled workforce has encouraged establishment of R&D centres (Farkas, 200). The Hungarian automotive industry has developed on the base of the earlier manufacturing of trucks and buses. The location in the Central Europe with markets in the West and in the East, and the ability to offer manufacturing at a relatively low cost and good quality have been key in attracting business partners (The Central and Eastern European automotive market).

According to relevant publications ethics in business and ethical behaviour can offer various benefits, such as

- acts to prevent a substantial harm to others (Robin, 2009)
- contributes to successful performance (Ferrell et al., 2012)
- generally has positive effects on diadic relationships (Luo, 2009)
- increases profit (Luo, 2009)
- generally has positive effects on diadic relationships (Halinen et al., 1999)
- results more stable business relationships (Luo, 2006)
- arouses larger satisfaction between the partners (Brown et al., 2006)
- causes less conflicts (Christopher at al., 2009)
- leads to growing reputation (Christopher at al., 2009)

Therefore our research questions are simple: Is it worthy to act and behave ethically? Does it bring benefits? If so, what kind of advantages can managers expect from ethics?
3 INTRODUCTION OF OUR EMPIRICAL SURVEY AND FINDINGS

Our empirical survey is the Hungarian pillar of a Finnish research in University of Turku where the methodology was developed and tested. We used depth interviews of qualitative methodology (Malhotra, 2007) because of the very sensitive topic. In our study the depth interviews are semi-structured, which means there are quite detailed sub points and naturally it is not obligatory to answer each question. Our aim is to use out flexibility of this method (Yeung, 1995) and to give freedom for respondents to speak bravely about such a sensitive topic. Certainly we guarantee anonymity during data collection, analysis and publications as well.

In this paper we deal with the Hungarian research. (The international comparison see e.g. Jokela et al., 2016). The ten depth interviews were made in 2015-16. We want to analyse various issues of fair behaviour in metal and machinery supply chains so three interviews are made with experts and the rest with practitioners. When we talk to experts, they summarize their several decades’ experiences, which means in our survey much more than 10 organisations are included. These talks represent various sizes of companies and their main distribution markets are also different. A part of them sells their products only in domestic market but others produce dominantly for export markets. Empirical data was collected with interviews and the main informants in the companies were senior managers, CEOs and one director of a board. Sensitivity also was a limitation in the study; the Hungarian companies in particular were hesitant to disclose their views to the researchers. We should add that respondents are successful firms. It seems to be logical that a successful – and possibly ethical – firm speaks with pleasure about these topics. Now the question is which was earlier: ethical behaviour or success?

3.1 General findings

The Hungarian economy is after transition from the socialist system to the capitalist one. In the previous system (actually it was also a mixed system but in a different way) many factors were determined centrally and mostly state-owned companies had to fulfil the plans so ethics played smaller role. In the early 90’s foreign investors appeared and bought old-fashioned companies in mass privatisation. A few experienced Hungarian former leaders started their own enterprises in small scales. If they have managed to survive their first years they can operate today. The majority of respondents are from this group. They started in small size in the early 90’s and now they are successful medium-sized firms with stable export markets.

As an expert says the companies that exist nowadays in the Hungarian metal and machinery sectors were established by foreign capital. They have foreign ownerships still today. They pay taxes in Hungary and contribute to the Hungarian GDP but no other effects can come out of their company gate. He also thinks they do not turn back their profit into the Hungarian economy like a normal domestic enterprise. Regarding suppliers they seem to prefer foreign suppliers.

The ethical behaviour can be more vital in asymmetric business ties where ownership and use of resources are unbalanced (Mouzas et al., 2007). We see that asymmetric business relationships belong to hot topics but its network aspect is less investigated. Mouzas and Ford (2007) state that interactive dependency does not definitely mean equal access to resources and it may happen that even the actors have chosen this case and we confirm their view.

Almost each respondent shared an unethical case, for example:

- “If a competitor makes an offer with irrationally low prices, potential buyers expect us to follow this. In spite of this, the firm which made this impossible offer went bankrupt soon after this deal.” (medium-sized firm)
- “The car assemblers ask more at lower prices. For instance at first the assembler orders 100 pieces for 1000 units but later 10000 pieces for 50 units.” (TIER-1 supplier)
- A buyer disappeared without payment.
- Another buyer instead of announcing its worsening financial situation, starts quality complaining, and they not only postpone payment but cause additional quality inspection costs for supplier.
• Business partners may cheat with taxes. This is unfair for competitors because these cheaters can calculate at lower costs and become more competitive.
• Certain buyers may expect extraordinary flexibility and even determine the supplier’s suppliers.

Despite these unethical behaviours the general opinion is optimistic and companies think it is not general but rarerly happens. They try to learn from these and have a view that this belongs to risks of business.

We met an interesting but seemingly successful method how to handle the so called Chinese effect: A respondent explained that a Chinese competitor copied their product in a false quality and the buyer was not satisfied. So the (Western European) buyer turned to this Hungarian firm and asked to build and install the complex system in China. They did it and it works well now, the Hungarian firm controls it through a remote control system from Hungary. The Hungarian firm is not worrying of being coped again because on the one hand they cannot keep their system in store (but has to sell) and on the other the Hungarian firm is better (and has satisfied buyer) for the time being.

3.2 Respondents’ supply chain experiences

We state that respondents are usually aware of various network affects. It seems that this is already a natural part of their environment. However we find another common feature of supply chains; this is the dominant role of the largest member of supply chain. This actor is generally located closest to the final customer. For example during procurement a large company receives the complex order and it gives many tasks further to its subcontractors and these subcontractors also give over some tasks to their subcontractors etc. In other case the car assembler gives almost final contact to the buyer – without any negotiations on it – and this position gives them both responsibility and power. It seems they practically instruct their suppliers. Certainly it is also the assembler’s interest that suppliers fulfil good performance but the car assemblers treat them severely.

It seems that size and position in the supply chain are the two most important factors which influence behaviour of companies in metal and manufacturing sectors. The leaders’ and owners’ personal attitude play another vital role.

Some typical answers to confirm our opinion:
• “We are medium-sized not only from statistical aspects but also due to our position in our supply chain. We are stressed from above and below and also sideways.”
• “Our position in the ‘food chain’: we already have to finance our activity but the firms below us are unable to finance themselves.”
• “Who is the dominant actor of supply chain? Just look at the direction of capital flow and you will immediately know it.”
• “There is no freedom for anyone. The network affect is the system of conditions where I live in.”
• “The impacts of multinationals are strong. They misuse their power including unwritten rules too.”

3.3 Does fair behaviour always pay off?

We meet very various cases and opinions regarding partners’ fairness. Most of the respondents think it is beneficial: it brings respect from buyers, it is a good reference and in quality management it belongs to normal processes (e.g. in car industry supplier should indicate own quality problems as soon as it is detected in factory). However some respondents call attention to bad tendencies where unfair companies can flourish in markets as well.

Our respondents said concerning fairness:
• “The economic responsibility lasts to the point it does not conflict interests.”
• “The aim is profit still today. The capitalist world operates like this. Only there are some bargains due to the interest of social cooperation.”
• “The fair behaviour almost always pays off. In quality management there is for example self-improvement what both our buyers and we practice towards our suppliers. This is good because if the customer recognizes a problem, comes here and it turns out that I have known that but did not mention, that is a much larger mistake.”
• “We know there are certain partners who pay only if we ask payment before delivery.”
• "I remember a case when a project was postponed one year because one subcontractor did not indicate serious problems and did not strive to cooperate.”

4 CONCLUSIONS

It is surprising and interesting when we inquire about competition, in most cases they start to speak about fairness. The opinions on general development of fairness is varying because some respondents explain negative tendencies and growing numbers of unfair stories while others identify positive changes in this field. Especially a respondent from quality insurance is optimistic and sees improvements. However a company owner simply says that he feels himself well when he behaves fairly. This means that market forces, economic logic just as well as internal needs can result ethical behaviour. Experts and the majority of managers agree that very unethical behaviour finally will have relevant consequences. But on contrary the very ethical companies will not reap their reward. This situation seems a little bit strange and does it give lesson to find the ‘optimal’ way somewhere between?

We understand that nowadays networking is a “conscious status” as it has been indicated by Kolos et al. (2006). However this still operates in a little passive way. Firms are aware of network effects and interdependency. They also see when cooperation does not work and a few network actors withdraw some information but they do not think that they could play a more active role and they could develop and improve their network as well. They seem to be more active in their dyadic relationships.

ACKNOWLEDGEMENT

Author gratefully thanks Professor Aino Halinen and Dr Päivi Jokela (both from University of Turku) for the possibility to participate in their research of ethics in business.

LITERATURE

9) Fazekas M. - Tóth I. J. - Lawrence Peter King (2013) Anatomy of grand corruption: A composite corruption risk index based on objective data. Corruption Research Centre Budapest
NEWS

PHOTOS OF THE MEB2017 CONFERENCE

Photo © by Dr. András Keszthelyi and Dr. Antal Szabó
INSTITUTIONAL PROFILE

ESTONIAN BUSINESS SCHOOL

Estonia is a small country in the Northeast of Europe with a population of around 1.4 million people. Between 1941 and 1991 it was part of the Soviet Union, subsequently regaining independence in 1991. Since then, the pace of change in all areas of society and economy has been amazing and Estonia has embraced the idea of market economy without hesitation or compromise. The size of the country and its orientation towards the West has meant that EBS has stressed the international perspective from the start, and the rapidly changing environment has encouraged EBS to respond and adapt at an adequate speed.

When EBS was founded in 1988, it was the first institution in Estonia to introduce diploma business education. Since business administration did not exist in soviet universities, there was no teaching tradition, no faculty and no textbooks: a difficult starting position. Today, the situation is much more favourable, but Estonia is still not Great Britain, and Estonian Business School is not (and does not claim to be) London Business School. Adapting to the Estonian context has meant, for example, that EBS uses many practitioners and higher level managers as lecturers in its courses, and that EBS acknowledges and appreciates most of its students working full-time or part-time in addition to studying. Another factor for our success can be attributed to us using both English and Estonian as languages of instruction, thus preparing students for the Estonian market and beyond.

Starting from the scratch can also be seen as an advantage since we were not tied down by outdated procedures and overwhelming traditions from the past. One example of this is the opportunity to use the right proportion of full-time and part-time lecturers. The opportunity to learn from best practices at other institutions around the world has been extremely useful. The growth and development of EBS reflects what could be called a multiple-customer approach: we have tried to cater not only to our students, but also to our students’ employers and the society as a whole. In doing so, it seems that EBS is well in line with trends among institutions of business education worldwide. The notions of anticipating change, revising traditional programs to fit actual needs, and last but not least, applying management theories and best business practices in the running of the institution itself appear to be gaining more and more ground even in the more traditional and slow-changing environments of Western business schools.

EBS is the oldest privately owned business university in the Baltics. With more than 1500 students, EBS’s goal is to provide enterprising people with academic knowledge, skills and values for its successful implementation. EBS offers degrees at Bachelor’s, Master’s as well as Doctoral levels. EBS has over 70 partner universities all around the world.

BUDAPEST ENTERPRISE AGENCY

Budapest Enterprise Agency (BEA) is the only organization founded by the Budapest City Council back in 1993 for the development and promotion of the micro, small and medium enterprises of the Hungarian capital. Our mission is to contribute to the development and expansion of viable, new and existing entrepreneurs based on the market needs, thus contributing to the creation and preservation of workplaces in Budapest and to the facilitation of the economic growth of the Capital.

The tasks of the BEA are defined by the Budapest Strategy of Facilitating the Economic Growth and Job Creation (2015-2021) accepted by the Budapest City Council in 2015. The principles of its operation are in line with the actions proposed in the Small Business Act and Entrepreneurship 2020 Action Plan.

The two pillars of the activity of the Agency are innovative SME development and non-profit microfinancing. BEA is one of the few European SME development organizations that provide both low-amount (below EUR 32,000) financial services for micro entrepreneurs and non-financial, business development services to SMEs. Women and young entrepreneurs are emphasized target groups of the services of the BEA.

By its non-profit microfinancial services the Agency enhances the access to finance of micro enterprises – especially for those which stand outside of the interest of commercial banks due to their size, to the low sum of the credit or to other causes. Budapest Enterprise Agency not only grants microcredits in the national, metropolitan and divisional microfinancing programs but helps the micro entrepreneurs with business plan and credit standing development consultancy and mentoring.

The Agency supplies innovative SME development services both for micro, small and medium enterprises and SME developer organizations and institutes.

In the BEA Smart programme – winner of the national competition of the European Enterprise Promotion Awards 2016 – designed for new and existing enterprises BEA established an entrepreneurial competence centre network with free services for the entrepreneurs. It organises events (conferences, workshops, lectures, networking events etc.) both at the seat of the Agency and at outplaced BEA Smart Points, presents entrepreneurial success stories and role models, builds a community, provides consulting and mentoring services. Regularly organizes startup and other entrepreneurial competitions with international presenting opportunities for the winners.

In the Startup Budapest programme the Agency presents the Budapest startup ecosystem at a regional, national and international level. Welcomes the delegations, startup managers and investors interested and organizes professional programs for them. Ensures networking and presenting opportunities for outstanding Budapest startups at internationally recognized events, festivals, conferences of the twin-cities of the Hungarian capital. Cooperates with the Hungarian embassies, consulate generals and consulates in the twin-cities and keeps contact with the municipalities and organizations associated with the municipalities thus enhancing the economical connections with the twin-cities of Budapest.

Within its economic development activity participates in the SME development activities of Budapest and its districts, in elaborating policies and creating an SME-friendlier business environment. In its Budapest SME Development Forums processes topics related to the growth of the economy of Budapest and presents entrepreneurial good practices both for the entrepreneurs and the SME developers. It has a national and international network having in the focus of the cooperation the organizations supporting...
SMEs, the authorities dealing with SMEs, the representatives of international markets and the partners in the economic development of Budapest, especially the organizations of the neighbouring and V4 countries.

The rate of employment in Budapest amounted to 72.4% in June 2016, which is 6% higher than the national average and nearly equally higher than the EU average. The unemployment rate comes to 4.5%, declining 1% in one year. The rate of employment increased significantly – reaching 824 thousand people – and unemployment decreased. Twenty-four per cent of enterprises operate in Budapest, of which 41% are corporate enterprises and 14% are self-employed enterprises. These figures reveal the relevance of Budapest in Europe and in Hungary, and the importance and responsibility of the work carried out by the Budapest Enterprise Agency.

Budapest has been ranked the most attractive city in Eastern Europe in 2014-15 from the point of view of foreign direct investment by fDi Magazine, an investment supplement of the Financial Times group. The magazine ranked 468 European cities and regions in five categories, such as economic potential, cost-effectiveness, infrastructure and business friendliness.

EDCi – European Digital City Index 2015 says: „Hungarian startups have grown rapidly in recent years. In 2010, there were a total of around 50 tech startups in the whole country, which has exploded to over 300 at the time of writing. Budapest, the ‘Pearl of the Danube’, is the epicentre for this activity. Prezi was founded here in 2009 and has undoubtedly served as an inspiring model for digital entrepreneurship in the city. The number of private and public initiative supporting startups has also increased in the past few years. Access to capital is still an issue for startups in the city – though this has been improved by the appearance of VC funds supported by the EU’s JEREMIE program. Additionally, the Hungarian government is actively supporting the growth of the startup ecosystem by channelling funding from other EU grants. The European Institute of Innovation and Technology (EIT) is also headquartered in Budapest. Many of the indicators show that Budapest is on the right path towards developing an ecosystem where entrepreneurs, venture capitalists and other contributing actors can work together to spawn successful new companies.”

Why Budapest?

- Emerging ecosystem of incubators, accelerators and co-working spaces
- Top 5 in cost of living
- Travel links to other European cities above average
- Digitally well-connected city with fast internet
- Welcoming startup
- Lots of well educated specialists in any field – Hungary is well known in the region for its high level of education. Business, technology and medicine are studies where our universities and colleges excel especially.

Very easy and free to start and cheap to maintain a one-person company

Please do not hesitate to contact us if you wish to get to know the Budapest startup ecosystem and its significant players, to meet Hungarian startups or if you have any other questions concerning SME-development.

Budapest Enterprise Agency
H-1072 Budapest, Rákóczi út 18.
Postal Address: H-1364 Budapest, P.O.B 226, Hungary
Phone: +36 1 269 6869
E-mail:info@bvk.hu
www.bvk.hu

Source: http://bvk.hu/budapest-enterprise-agency/
NEW COMING EVENTS AND CALL FOR PAPER

2017 SME ASSEMBLY ESTONIA

The SME Assembly is the most significant event for small and medium-sized enterprises (SMEs) in Europe. The conference takes place once a year during the European SME Week. Together with the network of SME Envoys, the assembly creates the governance structure of the Small Business Act.

The 2017 SME Assembly will take place in Tallinn from 22 - 24 November 2017.

The conference will be the flagship event of European SME Week.

START. SCALE. SPREAD YOUR WINGS

Following the tremendous success over 5 years, the 2017 SME Assembly is set to once again be the event of the year for Europe's SMEs and entrepreneurs, and those that support them. The Assembly focuses on how to make SME policy work on the ground, in order for Europe's SMEs to really thrive.

In this, the sixth year of the SME Assembly, the programme will again include the Schumpeter ‘Innovation in Enterprise’ lecture, the 11th European Enterprise Promotion Awards ceremony, keynote speeches from high-level politicians and dignitaries, interactive sessions where participants get an opportunity to drive the policy agenda, practical masterclasses and bootcamps, and an interactive expo to promote start-ups and scale-ups and those that support them. There will also be the Ideas from Europe semi-finale, showcasing the conclusion of an EU country wide competition to find the ‘Top 10’ ideas from visionary entrepreneurs across Europe.

Further information

Entry to the SME Assembly and European Enterprise Promotion Awards is by personal invitation from the European Commission only. If you would like to register your interest, please contact: smeassembly@loweurope.eu. Updates to the programme and speakers will be announced on this page, on the Promoting Enterprise news portal, via Twitter @EEPA_EU and on Facebook. The official event hashtags are #SMEassembly2017 and #EEPA2017.

The SME Assembly takes place during and in cooperation with the Estonian Presidency of the Council of the European Union.
NECROLOGY

The ERENET Secretariat informs our distiguessed Friends and Members of the ERENET as well as Readers of the ERENET PROFILE, that our Member

Ing. Marian GÁL

passed away on 26.05.2015. His was very young, just 39 year old. Unfortunately the University TUKE - where he was employed - did not informed us about this tragedy.

Ing. Marián GÁL, PhD. was born 21.4.1976 in Košice. After attending primary/secondary school he went on studying at High School, Kovacska street in Košice, which he graduated from in 1994. After that, Marián attended the Faculty of Economics of the Technical University in Košice, where he passed the Finance, Banking and Investment state examination in 1999.

After graduating from he worked there as research fellow and since 2007 as Assistent Professor. He taught lectures and seminars of Public Finance, Corporate taxing, Financial contrll, etc. both in Slovak and English language. He also led future Bachelors and Masters of Science and he was member of state examination commissions. Marián was both supervisor and Team member in domestic and foreign projects and he also published in domestic and foreign papers and conferences. He largely participated in social life of the University and he was especially known for organising sport events.

Marian GÁL taught also at the Faculty of Public Administration of the Pavol Jozef Safarik University in Kosice and at the College of Banking in Prague, Czech Republic.

He recieved his PhD. in Business and Organisational Sciences at the Faculty of Economics of the University of Miskolc, Hungary.

We express our sympathy for his family, friends and colleuges on behalf of the ERENET Secretary. We thank Vladimir Gazda for providing necrologue on Ind. Marian Gál.

Necrology on Slovak see at
The address of the ERENET Secretary sees below:

**Dr. Antal Szabó**, Scientific Director  
**Padányi Emese**, Secretary  
**HUNGARIAN YOUTH ENTERPRISE SUPPORT SOCIETY**  
**ERENET**  
H-1141 Budapest, Szugló u. 134., Hungary  
Phone: (+3630) 399 7067  
E-mail: emesepadanyi@gmail.com and erenetszabo@gmail.com  
http://www.erenet.org

**ERENET Secretary for South-Eastern Europe is the following:**

**INSTITUTE OF ECONOMIC SCIENCES**  
**Ms. Vesna Pejovic**, SEE Secretary  
11000 Belgrade, Zmaj Jovina 12, Republic of Serbia  
Phone: (+381 11) 2623-055, Fax: (+381 11) 2181-471  
E-mail: office@ien.bg.ac.rs  
http://www.ien.bg.ac.rs

**ISSN 1789-624X**